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Pall willingly puts rights plan to vote

By Marcia Parker

GLEN COVE, N.Y. — Shareholders of Pall Corp. will be among the first to vote on a shareholder rights plan voluntarily submitted to them by a major corporation.

But there are two catches. The rights plan shareholders will vote on Nov. 17 is not defined. And while the industrial and machinery equipment company vows to abide by the shareholder vote, it qualified that generous stand by saying management could vacate the agreement in the case of a hostile takeover threat.

Institutional investors — including the California Public Employees' Retirement System, the New York State & Local Retirement System, J. P. Morgan & Co. Inc. and Lincoln Capital Management Co. — own 52% of Pall's stock. Their views will be the deciding factor in the outcome. At least one consulting firm has recommended its institutional clients vote against the rights plan, although it praised the company for putting the plan to a shareholder vote.

"As far as we know this is the first time ever a U.S. company has submitted

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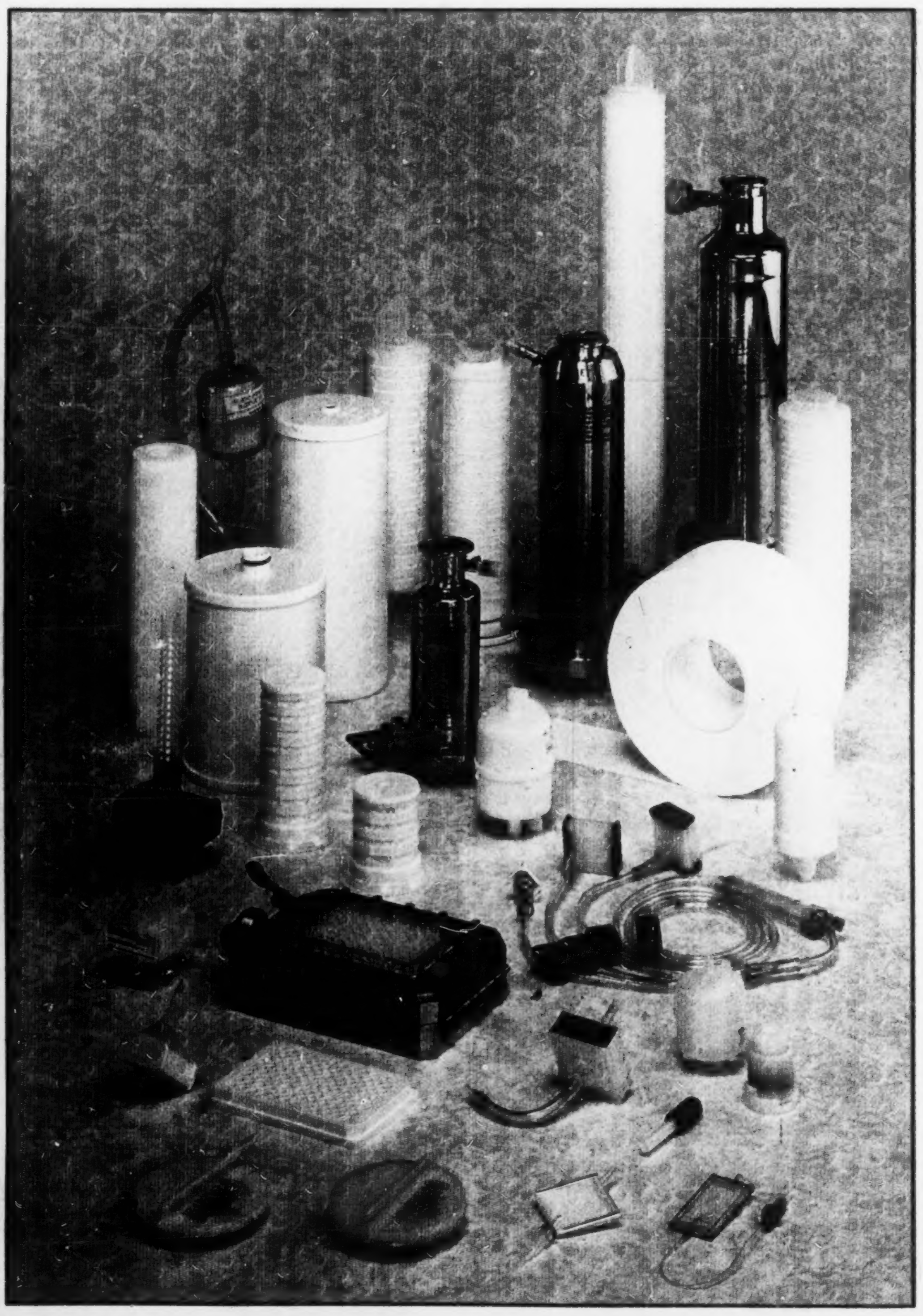
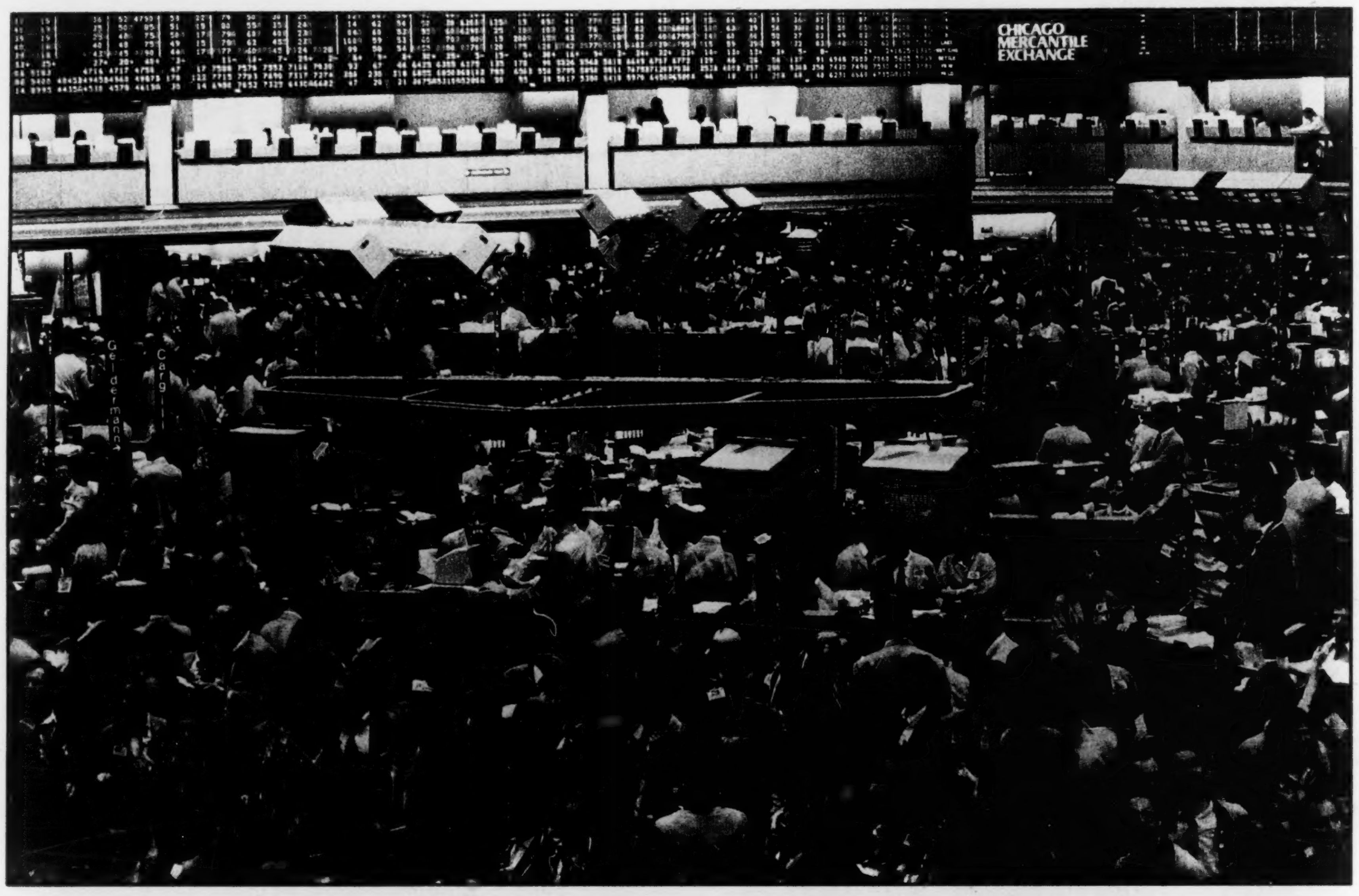


Pall Corp., which makes these pharmaceutical products, is one of the first major U.S. corporations to voluntarily submit a shareholder rights plan for a vote.



The Chicago Mercantile Exchange is a popular spot for index arbitrage, a practice defended by some as necessary to maintain liquidity and an integral part of the stock and futures markets.

Index arbitrage backed

A vital link between stocks and futures, investors say

By Trudy Ring

Some institutional investors, whose funds provide capital for stock index arbitrage, defend their use of the much-maligned strategy.

While critics complain stock index arbitrage creates market volatility and threatens the integrity of the market, these investors contend it creates an important link between stock and futures markets.

"Arbitrage has to take place when you have different markets," said Keith Tucker, vice president at E.I. du Pont de Nemours & Co., Wilmington, Del. "Someone is going to do it. I have no problem with arbitrage as a strategy in the equity market."

The $13 billion du Pont pension fund has used arbitrage to a small extent in its indexed stock portfolio, which totals between $1.5 billion and $2 billion.

Thomas Hartlage, director of benefit finance at BATUS Inc., Louisville, Ky., believes arbitrage adds liquidity, not just volatility, to the markets, and he likes to have the strategy available. The $1.1 billion BATUS pension fund does not do arbitrage in-house, but does not prohibit its managers from doing so.

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Overseas investors view furor with detachment — page 3

Cash execs go conservative

By Fred Williams

1989 Cash Management Survey

Corporate treasury departments are becoming more conservative in their cash management operations, a *Pensions & Investment Age* survey suggests.

In addition, the nature of cash management responsibilities seems to be changing.

Among the key findings of the survey:

- The rate of adoption of electronic funds transfer for receipt of payments from customers and for transmitting payments to vendors has peaked.
- The use of hedging techniques to protect against rising interest rates is declining.
- The use of compensating balances to pay for bank services also is declining.
- Problems in the banking industry haven't caused treasury officials to drop banks or reduce services, although nearly 40% of the respondents

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LATE NEWS

Exxon confirms it set up ESOP

NEW YORK — Still maintaining a veil of secrecy, Exxon Corp. confirmed it established a $1 billion leveraged employee stock ownership plan in its latest quarterly 10-Q filing with the Securities and Exchange Commission.

The ESOP ranks as the one of the largest, equivalent in value to those set up by Bell Atlantic Corp., BellSouth Corp. and Procter & Gamble Co., each also of $1 billion.

Exxon's ESOP owns more than 1.6% of the company's shares.

According to the filing, Exxon established the ESOP more than a year ago, in August 1988; only in the recently concluded third quarter, however, did the company sell the plan 16.3 million shares of preferred stock, valued at $1 billion and convertible on a one-for-one basis with the common stock. The ESOP plan financed the purchase by borrowing $1 billion in Exxon-guaranteed debt.

Exxon executives provided few details, perhaps because they are worried about being singled out by Congress for taking advantage of the tax benefits available for ESOPs in the wake of its Alaskan oil spill last March. It isn't clear if the ESOP would qualify for grandfathering of ESOP-related tax benefits as allowed in tax legislation pending before Congress.

An Exxon spokesman said the reason for the reticence was the company hasn't worked out the details of the ESOP.

U.K. panel OKs soft commissions

LONDON — Britain's Securities and Investment Board has decided to allow continued use of soft commissions by U.K. institutions, rejecting efforts to ban their use.

The SIB has proposed, however, curbing soft commissions in certain areas. It also is considering capping at 25% the amount of commissions an individual money manager could devote to such arrangements. The SIB's proposals would require that best execution be obtained for all transactions, regardless of whether soft commissions were involved.

The regulatory body also said soft commissions can be used to purchase investment-related information, data bases or software, and portfolio measurement services. Computer software and hardware costs will have to be allocated between investment- and non-investment-related purposes, the SIB said.

The SIB also said fund managers will have to document all such arrangements and provide adequate disclosure to customers.

As expected, the board decided to prohibit the use of soft commissions in net trades.

Changes made to adviser rosters

- DALLAS — The $2.6 billion Annuity Board of the Southern Baptist Convention hired Certus Financial Corp., San Francisco, to oversee nearly $1 billion of its guaranteed investment contract assets.

The hiring is one of the largest single GIC manager placements. The assets had been managed internally by the annuity board staff.

- WASHINGTON — Potomac Electric Power Co. hired two minority-owned investment management firms to manage fixed-income portfolios for the company's $220 million defined benefit pension plan.

A Potomac Electric spokesman said NCM Capital Management Group Inc., Durham, N.C., will manage $10 million and Reid McCoy Inc., Baltimore, $5 million.

The spokesman said the hirings were based on performance and investment style, not the fact the two firms are minority-owned. He said the hirings were reallocations of assets and no existing managers were dropped.

Fund taps Searcy for vacant post

KANSAS CITY, Mo. — United Telecommunications Inc. hired William N. Searcy Jr. as pension trust officer for its $1.085 billion pension fund, replacing Howard Harpster, who joined BP America Inc., Cleveland, as director-pension investments.

Mr. Searcy had been director-pension asset management for the $4.5 billion fund at Monsanto Co., St. Louis, since 1986. Monsanto has not found a replacement yet.

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Scorecard questionnaires in the mail

Questionnaires are in the mail for *Pensions & Investment Age*'s annual Scorecard report on investment managers' new business. In order to be included in the Feb. 5 report, money managers must return the questionnaires by Dec. 31. If you have any questions, please contact Christine Philip, directory coordinator, at (312) 649-5217.

New hope from high court

PBGC execs relieved over LTV review

By Joel Chernoff

LTV Steel's dispute with the PBGC over three terminated pension plans will be reviewed by the Supreme Court.

WASHINGTON — The U.S. Supreme Court's decision to review whether the Pension Benefit Guaranty Corp. can restore three pension plans to LTV Steel Corp. gave agency officials renewed hope for their case.

"We are pleased the Supreme Court will review it," said PBGC Executive Director James B. Lockhart III. But, he added, "the bottom line will not not be written for several months."

Private attorneys, however, are viewing with great skepticism the PBGC's claim that other companies will follow LTV's approach if the Dallas-based company is successful in transferring its pension liabilities to the agency.

The PBGC "is creating a bogy monster that doesn't exist," said Peter Shinevar, a partner with the Washington law firm of Bredhoff & Kaiser, who represents the United Steelworkers of America.

If the PBGC loses the appeal to the Supreme Court, agency officials fear being stuck with some $2.3 billion in unfunded liabilities from the LTV plans. Even after recoveries from parent-company The LTV Corp. are made, the agency still might be saddled with as much as $1.5 billion in liabilities. Excluding LTV, the agency has a $1.5 billion deficit.

At issue in the LTV case is the company's establishment of "follow-on" plans that made up for most benefits not guaranteed by the PBGC.

LTV filed to reorganize under Chapter 11 of the Federal Bankruptcy Code in July 1986, saying it no longer could afford its four plans. In the face of growing liabilities and potential "shutdown benefits" kicking in, the PBGC moved to terminate the plans in January 1987.

The follow-on plans were created as part of an agreement with the steelworkers union and assured retirees of receiving between 90% and 100% of the benefits not covered by the PBGC.

In arguing in September 1987 that LTV should be forced to take back three of the plans, the PBGC said the supplemental plans were an abuse of the pension insurance system. Instead of continuing to fund its pension obligations, LTV in effect shifted the liabilities to the PBGC, the government said.

What's more, the PBGC argued LTV's finances had improved substantially, and the company

Continued on page 93

Arizona cuts discretion of 4 managers

By Curtis Vosti

PHOENIX, Ariz. — The $7.6 billion Arizona State Retirement System has taken some discretion from its balanced managers and given its tactical asset allocation manager more discretion because the system hasn't been meeting its bogies.

The mandate to its balanced managers — that they maintain a 60% equity/40% fixed-income mix — came after studies done by and for the system showed managers, who previously had discretion to invest up to 60% in equities, were too conservative.

"We found that they tended to have an equity exposure anywhere from the mid-30s (30%) to the mid-50s," said Doug Lemon, the system's investment manager.

The four balanced managers, which together manage $2.4 billion of the systems assets, are: INVESCO Capital Management, Atlanta; the Los Angeles office of The Boston Co. Institutional Investors Inc.; IDS Advisory Group Inc., Minneapolis; and J.P. Morgan Investment Management Inc., New York. They have been instructed to draw up plans for phasing in the frozen mix before the system's investment advisory committee meeting later this month.

"Basically, we made our balanced managers specialty

Continued on page 93

S&P now evaluates realty fund quality

By Steve Hemmerick

NEW YORK — Standard & Poor's Corp. has begun the first public evaluation of open- and closed-end commingled real estate funds, a process that could mean the establishment of a powerful new arbiter in the lucrative real estate advisory business.

S&P's first evaluation — for the Western Properties Fund I, offered by AMB Institutional Realty Advisors Inc., San Francisco — was largely favorable. The fund will invest in smaller industrial and retail properties in the Western United States.

Another five or six evaluations are in the works through S&P's institutional real estate fund evaluation service, said Tom Fendrich, an S&P managing director. He did not name them.

The new service could prove popular with real estate money managers whose management staff and investment record receive a favorable evaluation. But the reaction of some managers, including those who have had to write down the value of their portfolios because of poor-performing properties in overbuilt markets, might be less than warm.

Still, S&P officials think their service will expand to the point that those real estate managers who don't pay S&P to have their funds evaluated will be conspicuous by their absence, as is the case in the bond market.

Fees for an evaluation vary depending on the extent of the evaluation needed, such as the amount of real estate a manager already manages that must be evaluated. S&P officials would give no range of fees.

According to Mr. Fendrich, the evaluation will not compete with consultants. Consultants, he said, will be needed to advise clients on what kind of real estate fund they need for their particular portfolio.

One aspect of the evaluation Mr. Fendrich said is particularly helpful is its on-site physical inspection of properties previously acquired by the manager. Mr. Fendrich said much of the analysis now being done by institutional real estate consultants is of a "quantitative nature," an examination of investment styles with little property inspection.

But some consultants — such as The Townsend Group, Cleveland — have been touting their on-site inspections.

S&P is well known as a rating agency, particularly for bonds, which it has been rating since the early 1920s. But unlike bond ratings, institutional real estate funds won't receive traditional letter ratings. S&P officials said they'll only be evaluating, not rating, the real estate funds and their managers.

While Mr. Fendrich contended the difference is an important one, the opinions given in the first evaluation seemed very much like ratings, although no letter-type rating was attached to them.

Early in the evaluation process, said Mr. Fendrich, fund advisers will be able to discuss S&P's viewpoints of their fund and challenge any information they don't believe is correct. If differences

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OPINION

401(k) plans blur the lines

Defined contribution plans, in particular 401(k) plans, rapidly are becoming the favorite form of retirement plan.

This is in part because defined contribution plans offer flexibility to both employer and employee. For example, the employer can structure the defined contribution plan so no contribution is required unless certain conditions are met — such as the achievement of acceptable profit levels or employees making contributions. The employer can often unilaterally set the level of contribution, and can contribute in corporate stock to preserve cash.

The employee also often has the flexibility to decide whether to contribute, and under current rules has access to his or her account to meet family hardships. In addition, upon leaving a company, the employee gets to take his or her account balance in a lump sum.

Unfortunately defined contribution plans, especially 401(k) plans, are blurring the line between retirement plans and savings plans.

Companies, the pension community and especially Congress must decide whether 401(k) and other defined contribution plans are really retirement savings vehicles, or simply savings vehicles.

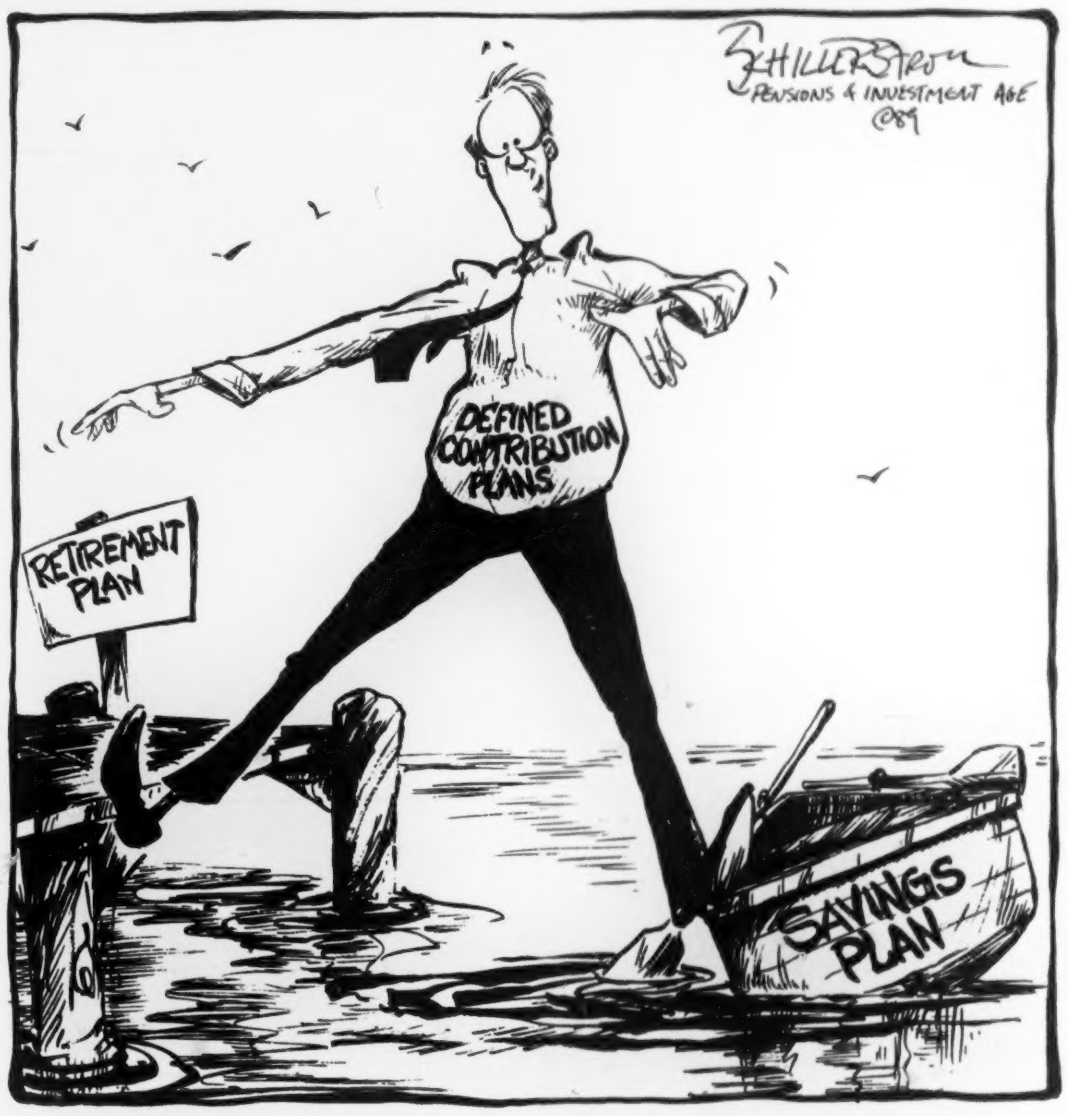
They must decide whether the goal of such plans should be to encourage saving for retirement, or simply to increase national savings. Either is a worthy goal now, when the national savings rate is so low.

But the two goals are not the same, and may even conflict. The danger is the flexibility provided to employees through defined contribution plans, especially 401(k) plans, may encourage short-term saving at the expense of retirement saving.

Employees may withdraw or borrow their accumulated balances to buy homes, or to put children through college, and then have little left for their retirement. In effect, the tax-advantaged saving originally designed for retirement may replace other forms of saving that might have been undertaken for these purposes.

That may be acceptable public policy, but it is not a retirement income policy. And it may lead to increased demands on the Social Security system when current workers retire.

Congress should reconsider its bias toward defined contribution plans, and decide what is an appropriate retirement income policy for the nation.



ESOPs poor choice for sole plan

The employee stock ownership plan is a wonderful employee benefit device. When properly used it can give employees a sense of ownership of a company, and participation in the management of their financial destinies.

But ESOPs are not acceptable as the sole retirement vehicle, nor are they a suitable way to provide post-retirement health care benefits, and for the same reason — benefits are too closely tied to the fortunes of the sponsoring companies.

It is as post-retirement health care funding vehicles that ESOPs are now gaining attention.

A number of companies are considering using them to provide health care benefits for employees after retirement.

But ESOPs by themselves are poor vehicles for this purpose because there is no way of knowing the value of the shares the employees have accumulated through the ESOP until they retire.

While it's possible the value of the stock may far exceed what employees need to buy post-retirement health coverage, it's equally possible the value of the stock will fall far short of what is needed, whether because the company performs poorly or because the employee retires during a bear market.

In effect, companies that replace a company-provided post-retirement health care plan with an ESOP are simply shifting the risk of the funding from themselves to the employees. The end result may be to leave unprotected some employees who thought they had coverage.

The ESOP could be an acceptable vehicle if the employer promised to make up the difference between the level of post-retirement health care the employee's ESOP account would purchase and a reasonable minimum level of coverage.

Employees anticipating post-retirement health care coverage then would not be left with a significant gap in that coverage if the company's stock underperformed, or if they retired in the middle of a bear market.

LETTERS TO THE EDITOR

Fiduciary Trust data

To the Editor: The Sept. 4 issue of *Pensions & Investment Age* included a listing of global custodians. Through some oversight, Fiduciary Trust Co. International was not included in the article. The following is the profile of Fiduciary.

Fiduciary Trust Co. International has $6.8 billion in total global custody assets, with $6.1 billion in U.S. tax-exempt global custody and $700 million in U.S. taxable global custody.

Of the approximately $45 billion in custody assets, just less than $7 billion are non-U.S. assets held for institutions and individuals. Fiduciary uses a variety of subcustodians to enable it to service assets in 19 countries.

Catherine K. Janson
Vice president
Fiduciary Trust International
New York

Wrong figures given

To the Editor: It was recently brought to my attention that *Pensions & Investment Age*'s Sept. 4 Master Trust edition contained an erroneous response from our offices relative to the assets that we manage under our master trust and master custody programs.

Please accept our apologies. The numbers in your publication reflect total assets, not merely master trust/master custody assets. The correct numbers are:

- Master trust holdings, $5.125 billion; and
- Master custody holdings, $12.8 billion.

J. Dan Davis
Citizens and Southern Trust
Atlanta, Ga.

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Banks beginning to feel woes

NEW YORK — The depression in the commercial real estate industry is beginning to have a pronounced effect on banks outside the beleaguered Southwest and the worst is yet to strike the banking industry, two firms warn in separate reports.

In a report based on third quarter data, Oppenheimer & Co. Inc., New York, said non-performing assets rose at most of the major banks it surveys, with the increase driven by further deterioration in the real estate sector.

Standard & Poor's Corp., New York, also sounded an alarm about declining bank loan quality in the face of the downturn in the commercial real estate market. The rating agency said non-performing real estate loans continue to climb, and reserve building could begin in earnest, followed by escalating charge-offs.

Cheryl Swaim, a banking industry analyst at Oppenheimer, expects real estate credit quality to continue to deteriorate and suggests investors consider commercial real estate exposure in making their investment decisions.

In the third quarter, Ms. Swaim wrote in a recent report, non-performing assets rose at most of the major banks she surveys, with the increase driven by further deterioration in the real estate sector. Oppenheimer estimates non-performing real estate assets account for two-thirds of total problem assets.

SunTrust has had the sharpest increase in problem credits overall, which have risen 158% during the past six months and as of Sept. 30 stood at 2.4% of real estate loans. Bank of New England had a 96% increase, of which real estate represents 4.8%; Citicorp had an 81% increase, with 3.2% being real estate loans; Fleet/Norstar had a 74% hike, but still has a low 1.9% in real estate problems.

First Interstate Bancorp. has the highest non-performing real estate asset ratio at 16.5%, followed by Bank of Boston at 11.4% and Security Pacific at 6.7%, the Oppenheimer report said.

S&P expects more downgrades at the regional banks as further problems surface, the agency said in the most recent issue of CreditWeek.

"Looking ahead, S&P expects more problems from real estate lending . . . deterioration in bank loan quality in other areas that have experienced above-average growth but have not yet demonstrated any undue problems — the West and the Midwest," the rating agency said.

Banks in New England, Arizona and Tennessee have reported dramatic increases in non-performing real estate assets since the third quarter of 1988, leading to recent downgrades, S&P said.

Real estate markets in New England have deteriorated and S&P noted real estate-related loan losses during the past year have caused more than one bank and thrift to reduce or halt dividend payments to preserve capital.

Bank of New England Corp., an aggressive lender, has seen its non-performing real estate loans

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QUALITY AND INTEGRITY
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Effects

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grade and even some lower grade properties. He didn't name the interested parties.

In separate interviews, officials for Salomon Brothers Realty Corp. and Morgan Stanley Realty, both of New York, said they are examining methods whereby foreign and other investors could best invest in the savings and loan properties. They declined to be more specific.

One investment banker who declined to be identified said it's possible institutional investors will pick off the best properties from the savings and loan portfolios, and the properties might be packaged for easier institutional investment. He added, however, such investors are unlikely to show interest in the lower quality properties. If those properties don't sell, he said, the federal government will ask for more money to finish the savings and loan cleanup.

The scenario of the most unsalable properties being dumped back on the government and taxpayers is a real possibility, according to Rep. Richard Baker, R-La., a member of the Housing, Banking, Finance and Urban Affairs Committee and a real estate developer.

At the ULI meeting, Mr. Baker called for federal money to be set aside from interim management of properties so they could be improved and sold at higher prices later.

Mr. Seidman, however, said many properties have very low values and are difficult to maintain. The best place for them is in the private sector, he said.

During the news conference, Mr. Seidman first appeared to dispute the notion that institutional-grade property values won't be significantly harmed by the savings and loan crisis. He noted many of the properties for sale in the $175 billion portfolio are top-grade ones.

J. McDonald Williams, managing director for the Trammell Crow Group, Dallas, however, disagreed. "I think what we have, and what we have had in American real estate for some years now, is a two-tier market. The investment-grade blue-chip properties (are) well-leased, well-managed and well-constructed. Those are at an all-time premium in terms of valuations and don't seem to be adversely impacted by these conditions.

"Then you have everything else, and in many cases there is no market for the very distressed or deep discounted market for those."

In response to Mr. Williams' statement, Mr. Seidman said, "But I would like to add that we already had that effect. I mean if you go to Dallas and look at some Class A properties today, rents went down because of a lot of high vacancy rates. But I agree with you we are not going to have any further effect in this inventory."

Harry D. Pierandri, senior executive vice president-asset and portfolio management and valuation at Equitable Real Estate Investment Management Inc., New York, agrees with Mr. Seidman.

In a separate interview, he said: "I contend the effects of the S&Ls have been felt already. In this way, the buildings are up, they're competing with us already and they're vacant. They're trying to lease space against."

Richard Kateley, president and chief executive officer of Real Estate Research Corp., Chicago, said rents in top-grade properties may still decline further "especially if the government tries to drag out the process of managing those properties." ■

Banks feeling woes

Continued from page 20

increase steadily in the past few quarters, and losses are just beginning to be realized. Shawmut National Corp. and Fleet/Norstar have less exposure, but non-performing real estate assets are rising. Bank of Boston's very high 17% non-performing real estate loans to all related outstanding loans consists of exposure mostly to markets outside New England, especially Florida.

Among the major Arizona banks, non-performing real estate assets have jumped to 27.3% of commercial real estate loans at Valley National Bank of Arizona, 31% at First Interstate of Arizona, and 23% at Security Pacific of Arizona.

Real estate-related loan problems have risen at several Southeastern banks, including Barnett Banks and Southeast Banking Corp. in Florida and SunTrust banks in Tennessee. The rating agency said the problem hasn't reached the scale of troubles in New England, but several pockets are very weak.

Non-performing assets of some California banks also have begun to increase. Security Pacific National Bank's ratio of non-performing real estate assets to commercial real estate loans rose to 5.5% in the second quarter, and Wells Fargo Bank's rose to 6.3%.

Wells Fargo Bank's consolidated non-performing real estate assets have risen to 7% of total loans partly because of Arizona exposure, although a majority of its problems are in Texas.

S&P expects further downgrades related to regional market problems.

Money center banks are the largest real estate lenders, but their exposures tend to represent smaller concentrations in their total loan portfolios. Although their non-performing real estate loans have begun to rise, their exposure is not expected to pose any significant problems.

Still, at Citicorp, non-performing real estate loans more than doubled during the past year, to 13% of total loans.

The non-performing loans were concentrated in the Southwest and Florida. Chase Manhattan Bank's domestic non-performing real estate assets jumped to 11.6% in the second quarter of 1989.

Chase and Citicorp both are experiencing problems in Arizona.

Chemical Banking Corp.'s real state exposure at its flagship New York bank is not posing problems, but its New Jersey bank is experiencing trouble. And Chemical's Texas Commerce Bank unit is saddled with extremely high levels of non-performing real estate loans, S&P said. ■

Banks' exposure to commercial real estate

	Rating	Real estate as % of loan portfolio	Non-performing real estate assets as % of commercial realty loans 1989[1]	1988	1987
Bank of New England	A	30.5%	7.5%	3.4%	1.7%
Bankers Trust	AA+	17.7	11.6	5.7	3.9
Chase Manhattan Bank	A+	21.3	11.6	7.4	7.7
Chemical Bank	A	18.0	6.9	4.3	4.8
Citibank	AA+	30.3	10.1	6.6	4.1
Citizens & Southern Nat'l Bank	AA–	21.2	1.3	3.2	2.0
Connecticut Bank & Trust	A	28.3	2.6	1.3	1.4
Connecticut Nat'l Bank	A	23.5	6.7	4.1	2.9
Crestar Bank	A	18.9	1.6	0.9	0.8
Fidelity Bank	A–	17.3	9.7	13.3	6.3
First Fidelity Bank of New Jersey	A–	17.7	3.3	4.3	3.2
First Interstate Bank of Calif.	A	16.7	8.6	6.0	8.7
First Nat'l Bank of Boston	AA–	27.8	10.7	5.5	3.3
First Nat'l Bank of Chicago	AA–	17.3	5.8	3.6	5.3
First Union Nat'l Bank	AA–	19.3	3.5	1.3	2.9
Michigan Nat'l Bank	A–	37.8	2.5 *	1.1	1.7
NCNB Nat'l Bank of Florida	A	37.5	2.3	2.2	4.0
NCNB Nat'l Bank of North Carolina	A	28.6	2.2	1.8	2.3
NCNB Texas	A	18.8	5.5 *	2.3	NA
Philadelphia Nat'l Bank	AA–	15.8	0.7	0.6	0.4
Seattle First Nat'l Bank	BBB+	27.0	7.9	6.2	5.2
Security Pacific Nat'l Bank	AA	20.6	5.5	5.6	4.7
Southeast Bank	A–	26.2	4.0	2.3	4.2
Sovran Bank	A+	18.9	1.3	1.4	0.6
Texas Commerce Bank	A	21.5	43.8	30.1	23.3
Union Bank	AA–	22.3	7.4	6.4	7.0
Valley Nat'l Bank of Arizona	BB–	23.7	27.3	18.8	9.4
Wachovia Bank & Trust	AA+	17.4	0.8 *	0.3	0.3
Wells Fargo Bank	AA–	26.5	6.3	2.9	1.8

[1] Through second quarter

* as of March 31

NA not applicable

Source: Standard & Poor's Corp., New York

After producing more than

$460,000,000

in revenues,
involving properties with an aggregate asset value of over

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representing more than

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FOREIGN EXCHANGE

Hedging earns a new respect

International thrust makes strategy vital

By Curtis Vosti

In the past few years, whether to hedge foreign currencies has become a frequently contemplated question for pension fund sponsors with international investments.

Basic currency hedging is the practice of lowering the risk that a foreign currency would devalue in relation to the dollar and result in a real foreign exchange loss for the stocks held from the country with that currency.

Hedging can be accomplished through the use of forward contracts, futures or options, but forward contracts are used predominantly, according to Barry Gillman, chief executive officer of PCM International Inc., Newark, N.J. Forward contracts purchased through foreign exchange banks lock in an exchange rate for a specified period of time.

Mr. Gillman said PCM, and most managers, use forwards because they offer more flexibility in time periods and amounts than do futures.

Anne Melissa Dowling, senior vice president in charge of international investing at Travelers Investment Management Co., Hartford, Conn., said the firm, which mostly uses forwards, is expanding its use of options in tandem with the forward contracts for the possibility of increasing yields.

While hedging was virtually non-existent until fixed exchange rates were eliminated in the early 1970s, interest in currency hedging has picked up recently as the dollar has vacillated from its strength of the mid-1980s.

"Currency hedging has become an asset class in itself," said Ms. Dowling.

Barry Gillman says forward contracts offer more flexibility in hedging.

According to Paul Burik, an associate at Ennis, Knupp & Associates, Chicago, the exchange rates amplify the volatility of an international portfolio, but do not increase the expected returns. His research has shown that between 1979 and 1988, unhedged foreign stock returns had a standard deviation of 19.7%, while local currency stock returns had a standard deviation of only 14.9% and hedged returns had a standard deviation of 15.9%.

"This currency return volatility has been large whether the dollar has been weak or strong," he said.

This year, pension sponsors and investment managers have been besieged with reports on the subject. In the past few months, Goldman, Sachs & Co.; PaineWebber Group Inc.; Salomon Brothers Inc.; and Ennis, Knupp are among those firms devoting publications to the topic, and pension funds and investment managers are taking note.

"Most of the current literature tells us that when you are fully hedged you get slightly lower returns and significantly lower risk," said Richard Gibson, investment director of the Wisconsin State Investment Board, which hedges its $100 million in internally managed international fixed income and a large part of its $280 million externally managed international fixed income.

"What that tells us is that for very little reduction in return, you reduce risk considerably," Mr. Gibson said. As a result, Wisconsin's fixed-income investments are "mostly hedged, most of the time," he said.

The costs associated with hedging — the high foreign transactions costs added to the liquidity problems of some foreign markets — are such that some in the industry say it's not always the answer.

That is more true when it comes to hedging equities than fixed income, as about 80% of fixed-income returns come from currency, according to TIMCO's Ms. Dowling.

However, PCM's Mr. Gillman says he thinks hedging transaction costs are "very overrated" and are "minuscule" compared

Continued on page 32

Volume by type of trade

($ millions)

	1989	1988
Spots	$4,092	$1,767
Forwards	2,950	1,630
Foreign currency options	1,227	517

Source: Greenwich Associates, Greenwich, Conn.

Companies trading outside home market

	Use Tokyo	Use N.Y.	Use London
British	4%	18%	NA
Canadian	16	22	17
Japanese	NA	38	27
U.S.	13	NA	32
West German	*	5	6

*Less than 1%

Source: Greenwich Associates, Greenwich, Conn.

Questions surround 1992

U.S. must prepare for economic unification of Europe

By James L. Borden

To many North Americans, the subject of 1992 is an enigma. Given the historical experience of interstate commerce in both the United States and Canada, there is little doubt the concept of a unified Europe is sound. The question is whether it is reasonable to assume a task of this magnitude can be accomplished by consensus and, if so, within the agreed target.

In foreign exchange terms, if most North Americans were asked to deal on this enigma they would quote, but offer a delivery option. Recognize the event, but price it to 1999 if delivery takes place earlier — "no problem."

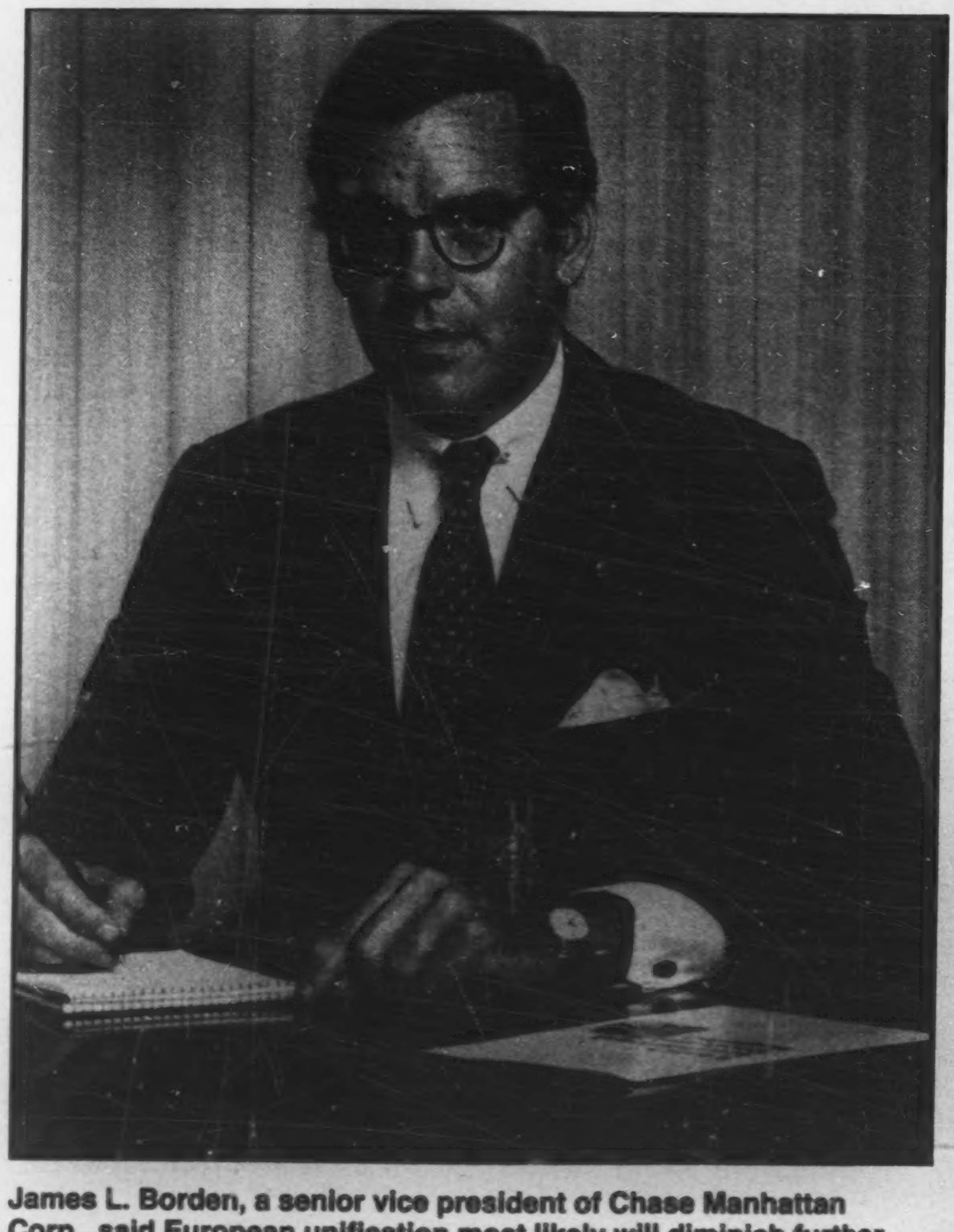
Given this attitude and current lack of clarity as to the final framework for the unified market, North Americans are only beginning to factor 1992 into their planning process.

Referring to the example of a delivery option, there *may* be a "problem" for North America if the Single European Act is delivered on time. North American industries might not be ready for the European challenge.

In order to examine the expected interregional relationship in the financial services industry and particularly foreign exchange, one must make a few assumptions about the financial environment into which a Single European Act will be delivered.

- The enigma of three conflicting factors — individual country self-determination, economic disequilibrium and the stated goals of 1992 — can only be managed through progressive currency adjustments. The ultimate objective of the Delors Committee, to establish a single currency and a European Central Bank, cannot be accomplished in the foreseeable future.
- The United Kingdom cannot afford to be left out of the evolving trading block and will have to demonstrate its resolve by joining the currency union.
- While London will remain the dominant financial market place, Frankfurt, Paris and Amsterdam will continue to evolve in importance.
- The European Community recent move to defuse the potential protectionist elements inherent in a reciprocity test for non-EC entrants to the new unified market will be successful.

Continued on page 29



James L. Borden, a senior vice president of Chase Manhattan Corp., said European unification most likely will diminish further the role of the U.S. dollar.

Option strategies take on new role in global business

By Hillary Durgin

As corporations become more sophisticated in their efforts to combat dollar volatility, they are increasing the use of currency option strategies to protect their foreign earnings.

"Currency options are really growing much faster than anything else," said David G. Bullock, a principal at Greenwich Associates, the Greenwich, Conn., consulting firm.

A currency option offers the buyer the opportunity to purchase a specific currency, such as U.S. dollars, at a certain rate during a specified period. The buyer, however, is not obligated to purchase the currency. The arrangement is similar to an insurance policy in that the purchaser pays a premium in order to get protection against potential risk.

If the dollar goes up, the company could buy dollars at the negotiated rate plus the cost of the option. Alternatively, if the dollar weakens, the company could buy at the lower price and possibly recoup the cost of the unexercised option.

"The introduction of the option has [illegible] new levels of opportunity of how to hedge risk," said Donald Catona, manager of treasury operations at Air Products & Chemicals, Allentown, Pa.

Air Products has been using currency options since [illegible] to reduce exposure to risk. The industrial gas and chemical company tries to add value but does not take speculative positions in order to increase profits, Mr. Catona said. Foreign operations account for 25% of Air Products' $2.6 billion in annual sales, Mr. Catona said.

The globalization of business in the 1980s and the growth of volume and size of transactions conducted between markets has spawned a growing corporate interest in the flexibility options provide, corporate and investment professionals say. While companies don't always exercise their options, strategies that employ them can cushion a company's exposure to risk and potentially reap substantial profits.

The increased use of currency options is part of the burgeoning growth of foreign exchange trading overall. In 1988, the average U.S. company's annual foreign exchange trading volume, including spot, forward and currency options trading, soared to $6.892 billion, up 106% from $3.34 billion last year, according to Greenwich Associates' latest study of the the foreign exchange practices of large U.S. corporations.

A spot trade is the most immediate transaction a buyer can make. The contract, generally made over the telephone, locks in an exchange rate for a transaction [illegible] two days. A forward contract also locks in a rate of exchange but is longer than a spot and, unlike an option, obligates the purchaser to take delivery of the currency.

Of the three principal foreign exchange strategies, cur-

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Foreign exchange trading takes off

By Leonard J. Hollie

The overall foreign exchange trading volume of U.S. corporations is burgeoning, with the average U.S. company's annual foreign exchange trading activities up more than 100% from last year — the second consecutive year foreign exchange trading volume has boomed.

Some analysts attribute the substantial rise in foreign exchange trading by U.S. industrial corporations to an increase in exports, and an effort to increase profits rather than to protect them. These corporations have to be more sensitive to the impact global currency swings have on their earnings.

Leslie Nanberg, vice president of Massachusetts Financial Services, Boston, said any U.S. corporation that has subsidiaries throughout the world would have to do business in the local currency. "When that currency is repatriated into U.S. dollars, those earnings could be greatly affected by the kinds of options or hedging that is used," he said.

For 1989, the average domestic company's annual foreign exchange trading volume, including spot, forward and currency option trading was $6.892 billion, a 106% increase from last year's $3.34 billion, according to data from Greenwich Associates, Greenwich, Conn., in its latest study of the foreign exchange practices of large corporations.

In 1988, the foreign trade volume was 60% higher than the average trading volume for 1987, the study shows.

"The volumes are up because corporations are more speculative and are involved in more trade-related activities in the international market activities," said David Bullock, a Greenwich Associates partner in an interview from London. "These companies are more actively managing their positions," he said.

Mr. Bullock, and Greenwich Vice President John Canaday compiled the foreign exchange study, which is part of the Greenwich Report "The Cauldron Bubbles: Large Corporate Finance 1989."

Mr. Nanberg said he also sees tremendous growth in foreign exchange currency trading and thinks the growth is an attempt to gain control of the kinds of risk corporations are taking. "It's also an attempt to control a component of a corporation's earnings that is not specifically related to their own business," he said.

The biggest companies, those with $5 billion and more of trading volume, have the greatest demand for foreign currency options, Mr. Bullock said. Thirty-six percent of those companies now use foreign currency options, up from 29% in 1988.

The industry most likely to use foreign currency options is commodities, with 34% using them now compared with 24% one year ago. Also, 24% of finance and insurance companies now use foreign currency options, up from 20% in 1988.

Wholesale and retail trade companies are the least likely to use foreign exchange currency trading, the report shows.

When trading currency, U.S. corporations' currency of choice is the British pound, favored by 84%; Canadian dollars, 83%; deutsche marks, 81%; and the yen, 79%.

Corporations use various strategies, such as hedging and forward options, so they will know when to repatriate their currency and how much that currency will earn when traded. Those specialized foreign exchange strategies most in demand by corporations for 1989 include currency swaps of seven days or less, which is preferred by 30% of large corporations. Last year, 24% preferred this option. Thirty-two percent prefer cross-currency trading, up from 30%, and 18% prefer interest rate options, caps, collars or futures, up from 13% a year ago. Thirty percent of corporations now use interest rate swaps, compared with 28% last year.

"Another interesting strategy is option arbitrage puts of foreign currency interest rate swaps and bond issues," said Mr. Bullock. "This allows the borrower to repay the loan in his elected currency."

This year, more corporate treasury managers, 16%, are trading foreign exchange more actively for profit, up from 10% last year. The typical U.S. company manages 59% of its currency exposure by trading in foreign exchange markets, according to the Greenwich report. Trading is used to manage four times as much exposure as netting payables and receivables, the next most used technique. ■

David Bullock said companies are involved in more trade-related activities.

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Europe

Continued from page 27

In the foreign exchange business, the prospect of 1992 brings both good news and bad news.

The good news is that interregional capital flows are likely to increase dramatically as '92, or more precisely as Jan. 1, 1993, approaches and that intraregional currency volatility, within the Common Market, also will increase. This volatility is likely to last through the remainder of the century.

The bad news is that the primary impact of 1992 on the currency markets will be to further diminish the relative role of the U.S. dollar and, while it is unlikely to occur in this century, the events of '92 ultimately will necessitate adaptation of a single European currency. That action will reduce trading and positioning opportunities as they now exist, unless deregulation in Asia and movement toward free markets and convertibility in Eastern Europe provide some offset.

Let's briefly examine the good news first: capital flows and volatility — it sounds like nothing less than foreign exchange paradise.

In many ways it will be, and the vision is extremely attractive after the generally flat trading conditions of the first quarter of this year. We already are seeing significant evidence of interregional capital investment.

Non-EC entities are positioning themselves to participate in the integrated market. The best example of the trend is the recent Japanese investments in Toyota UK and Nissan UK. The announced objective is to raise the combined output of the plants to 450,000 units per year by the end of the decade, second only to British Ford in the U.K. market.

After Jan. 1, 1993, the emphasis on capital flows will be intraregional as unit trusts, insurance companies and other financial institutions are able to freely gather investible funds across national borders, and as more companies tap evolving sources of capital outside of their traditional domestic markets. Most of this activity will increase foreign exchange business.

Returning to the prospect of currency volatility, one can anticipate additional shifts of capital within the EC because of the lack of harmonization in reporting requirements, taxes and labor practices, among other things. While Home Rule will apply to regulations across the new market, these regulations vary greatly among the member countries.

In foreign exchange terms, the lack of harmonization will create geographic investment arbitrage opportunities. Cross-currency foreign exchange business will continue to grow dramatically.

Turning to the bad news from the North American point of view, the welcome prospect of the buildup in intra-EC volatility is dampened by the accompanying increase in central bank intervention. The intervention primarily will be conducted against the Common Market's strongest currency — the deutsche mark — and reserves will be built up in that currency.

The accumulation of reserves in deutsche marks is likely to increase pressure for deutsche mark pricing of commodities such as oil. As the regional European financial market develops in size, capitalization and liquidity, major exporters to it are likely to respond favorably to a change in pricing for EC business because of their own need for diversification.

This prospect could further increase direct non-dollar cross currency business and diminish the overall role of the dollar.

The second major element of bad news is the eventual prospect of a single currency. From a foreign exchange business viewpoint, it is difficult to envisage a trading environment without the British pound-deutsche mark cross. I think we can safely say the primary factor in the first quarter's 25% to 40% decline in reported foreign exchange revenue from the similar period in '88 can be attributed to lower volatility in that particular cross.

The ultimate success of a barrier-free Europe, however, probably will depend on the resolve of the members to adopt a single currency. The problems of self-determination, fiscal and monetary management are likely to delay this move for many years.

In summary, while 1992 is in many ways an enigma, its approach and ultimate implementation will create significant inter- and intraregional opportunities and risks. In order to take advantage of the opportunities, North America still has considerable work to do.

Many institutions are well prepared and are only waiting for further resolution of the complex issues being addressed by the Common Market itself, but the majority need to position themselves for what is generally recognized as the most dynamic development in the history of international markets.

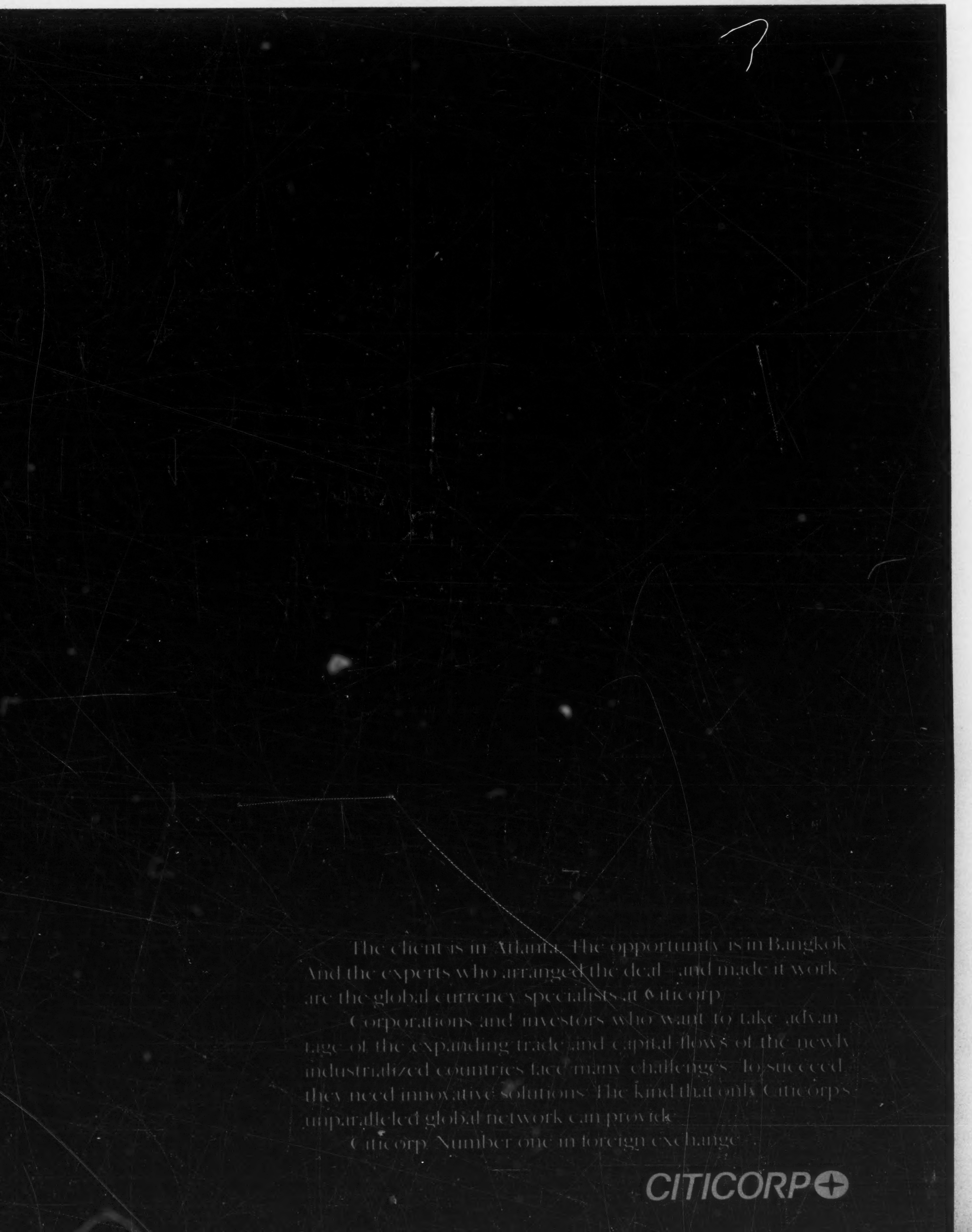
North America has prospered in its relatively free competitive environment and it therefore applauds the removal of barriers within the Common Market.

The primary risk is the emergence of protectionism during the difficult, potentially volatile period leading up to and implementation of the Single European Act. For the foreign exchange markets, there is both good news and bad. Because the good news of capital flows and volatility is likely to come first, we will take it. Longer term forecasts have a very low credibility rating among foreign exchange professionals.

The structural issue with more immediate impact than a reduction in the role of the dollar or a single Common Market currency, is how the North American market can keep pace with the growth among the other regional markets.

Results of a recent Central Bank survey do not indicate a significant erosion in North America's relative position from 1986 in world foreign exchange dealing. New York volume increased to $129 billion per day from $58 billion in 1986, while London increased to $187 billion from $90 billion and Tokyo to $115 billion from $48 billion.

New York, however, has lost some of its depth, particularly in the afternoon. With the approach of 1992, foreign exchange activity will be further concentrated in Europe's trading day. North America might have to move up its trading hours to capture more overlap time with what clearly is and will remain the dominant foreign exchange trading market — Europe. ■



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Option strategies

Continued from page 27

rency options that guarantee a forward exchange rate have enjoyed the highest growth rate, Mr. Bullock said.

While currency options only represent about 5% of the total average foreign exchange activity, the average amount of currency options traded by U.S. companies in 1989 climbed to $1.227 billion, up 137% from $517 million last year and $215 million in 1987.

Average trades in the spot market grew to $4.1 billion, up 132% from $1.76 billion in 1988. The average volume of forwards traded in 1989 grew to $2.95 billion, up 81% from $1.63 billion a year ago.

Mr. Bullock said currency options have seen marked growth because of three factors: more corporations are writing their own currency options; there are longer dated currency options available; and more currency options outside the major currencies like the yen and the Canadian dollar are being used.

Overall, he said, corporations are beginning to understand currency options are not synonymous with speculative risk. Companies are coming to terms with the idea that the premium guarantees a certain measure of protection, he said.

Professionals in the financial services industry also say corporations are beginning to understand the benefits of currency options.

"If their object is to protect their dollars, then an option is perfect for them," said John Lynam, a vice president at Security Pacific National Bank, Los Angeles. More companies are willing to pay the premium to protect their earnings against risk, especially with the added incentive of making a profit, Mr. Lynam said.

Air Products began using options in 1985 as a way to reduce the potential risk associated with a contract pending in Europe. The dollar was particularly strong at the time, and Air Products wanted to take advantage of the favorable exchange rate with the deutsche mark, but it didn't want to be locked into purchasing the currency if the transaction fell through:

"In order to lock into attractive levels (of exchange) without taking on undue risk, we employed options," Mr. Catona said. The company decided not to use a forward contract because it would have been required to purchase the currency even if the business deal fell through.

"If we knew for certain that we would need the marks and the project was going ahead, we probably would have bought forwards," Mr. Catona said.

A spokesman for a major U.S. foods company who asked not to be named also uses options to reduce risk. The company produces foodstuffs abroad, with costs fixed in U.S. dollars, and sells its products in Europe and Japan. Options are a way for the company to hedge its exposures at what it considers to be attractive dollar levels.

Options also allow the company to underprice its competitors, the spokesman said. Because their competitors don't hedge, the food company takes advantage of the dollar's strength and uses it to underprice its competitors to capitalize on market share.

Options are preferable to forward contracts, the spokesman said, because they don't subject the company to the same marked-to-market risk. While forwards are marked to market every quarter, options remain at book value. Because the company employs hedges for extended periods, options serve to reduce market volatility. ■

Money movers is a section that details the appointments of money management firms for tax-exempt funds.

The money movers section appears in each issue of *Pensions & Investment Age*.

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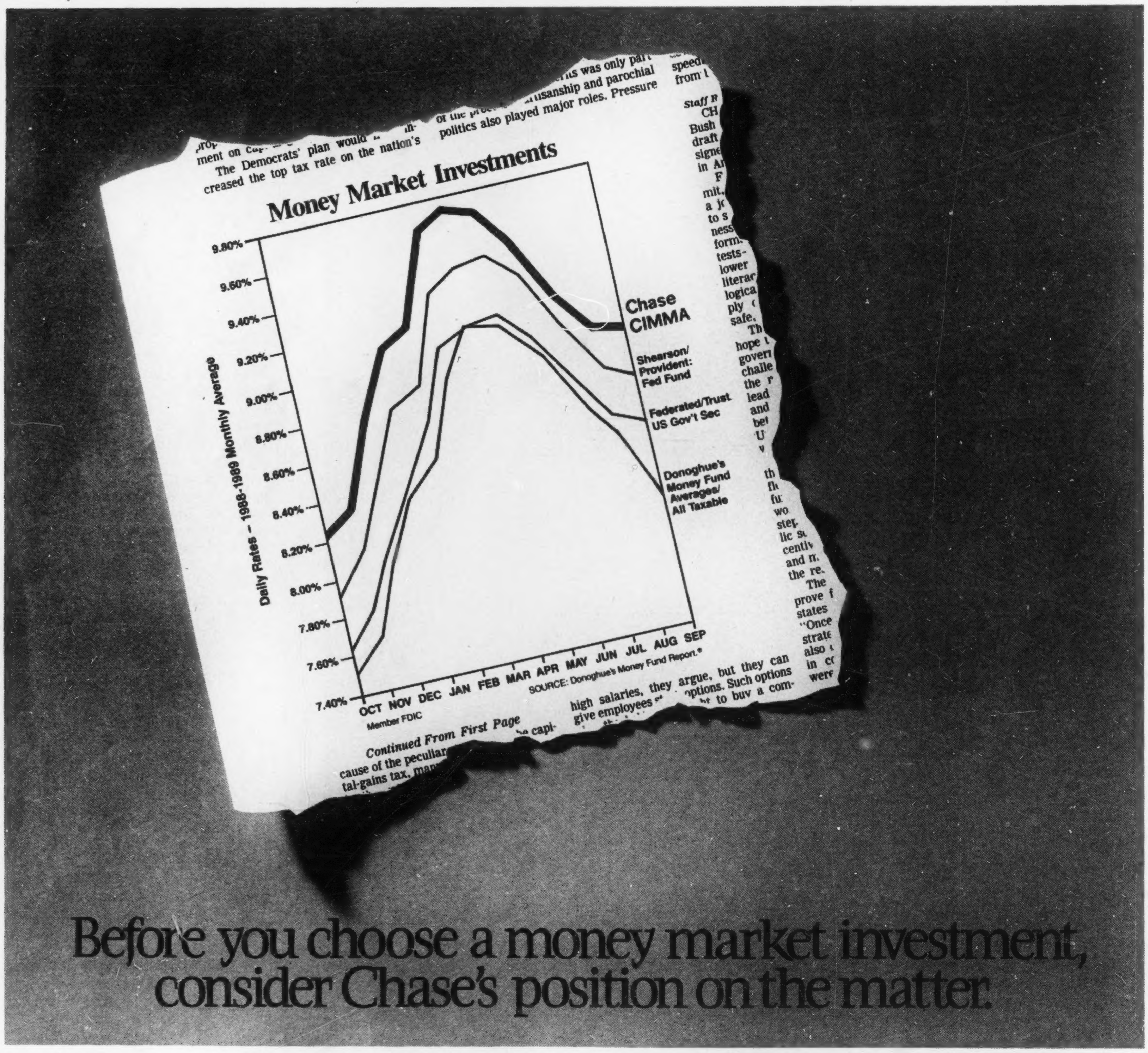

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Divestiture opinion sought

High court to be asked to review Maryland decision

By Trudy Ring

BALTIMORE — Four participants in the $1.5 billion Baltimore Employees' Retirement Systems plan to ask the U.S. Supreme Court to review a Maryland court's recent decision upholding Baltimore's South Africa divestiture law.

If the court decides to hear the case, it apparently would be the first one on divestiture of South Africa-related securities to come before the Supreme Court. The court's action could have far-reaching effects, legal experts said.

If the high court decides the lower court was wrong, public pension funds would have to stop divestiture, said Roy Schotland, professor of law at Georgetown University, Washington. If it rules divestiture is acceptable, this may put pressure on more public funds to adopt such a policy, he said.

The participants have until Nov. 30 to file their petition to the Supreme Court, said their attorney, Douglas Foster, president of the Atlantic Legal Foundation, New York.

"They think the Maryland Court of Appeals was wrong and the decision was egregious," he said.

That court, the highest court in Maryland, issued a decision Sept. 1 upholding the city ordinance requiring the systems to divest themselves of securities in companies with significant operations in South Africa (*Pensions & Investment Age,* Sept. 18).

Trustees of the retirement systems filed a suit challenging the ordinance about three years ago. Baltimore Circuit Court upheld the ordinance, so the trustees took their case to the appeals court. The appeals court, unlike the circuit court, allowed the participants to intervene in the case.

The trustees decided not to appeal the case further because the appeals court had addressed their primary concerns, the legality and validity of the ordinance, said Tom Taneyhill, deputy administrator of the systems.

The appeals court ruled the ordinance did not, as the trustees' suit had claimed, conflict with federal law; pension fund management traditionally is a matter for local regulation, the court held.

The court also held the cost of the measure was so small it would not impair the contract between the retirement systems and their participants and beneficiaries.

Mr. Foster, however, said divestiture may affect benefits because of a variable benefits provision of the systems. If the systems' annual return exceeds 7.5%, benefits are increased.

The appeals court's decision said that while the participants and beneficiaries have a contractual right to both defined and variable benefits, they do not also have the right to control the investments. If the earnings were sufficient to warrant the benefit increase, and it was not made, the participants and beneficiaries could reasonably argue they had been deprived. But an action that may reduce the earnings does not provide a basis for such a claim, the court held. ■

Respect

Continued from page 27

with average turnover costs in international equity portfolios.

Wisconsin's $325 million in international equity investments — $100 million managed internally — are not hedged.

"The studies are not so clear on equities," Mr. Gibson said. "The theory is the value of the currency may be reflected in the price of the stock."

Oechsle International Advisors, Boston, prefers to let its active equity decisions do its hedging.

"We do a lot of natural currency hedging," said Oechsle partner Stephen Langer. "We incorporate the hedging decision constantly in stock selection and country allocation. We think it's a very difficult game, and in our investment experience we don't know of anybody that does it well over long market cycles."

According to Ennis, Knupp's Mr. Burik, hedging creates a need for cash flow that doesn't normally exist, because of the need to have a mechanism to liquidate securities and the high transaction costs involved in doing so with foreign securities.

"It's not a big difference, but for the smaller fund, the pension administrator has enough to do without another set of decisions," he said.

Investment managers who handle international investments for pension funds typically have had discretion on whether to hedge, but with the increased popularity of hedged benchmarks, they are subtly losing that discretion.

"They typically don't direct us to hedge in portfolios where the benchmark is unhedged," said Richard Carr, managing director of Brinson Partners Inc., Chicago. "But more than half of the time we will be hedged."

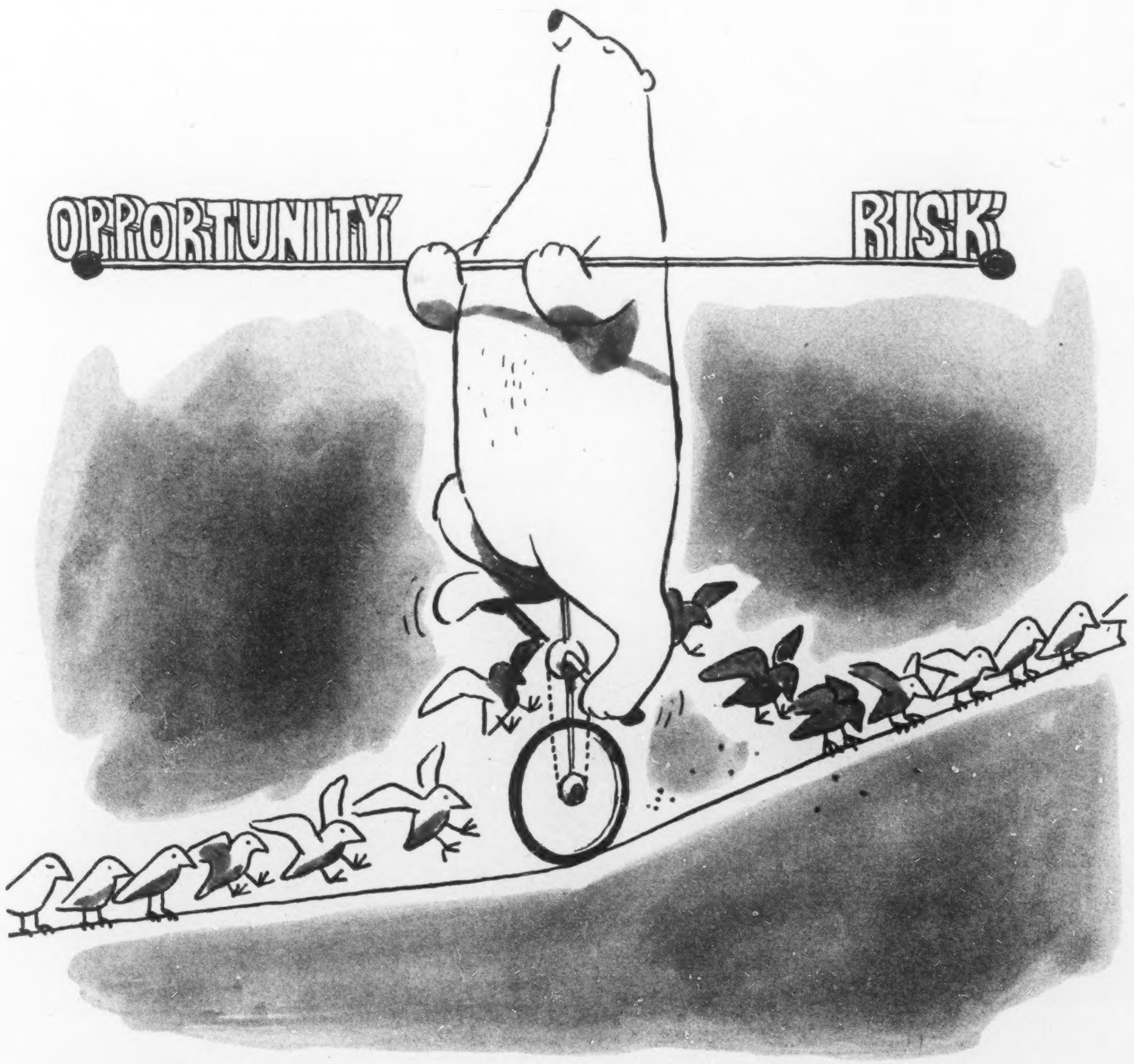
He said the firm has four clients that have adopted a fully hedged benchmark, and the interest in such hedged benchmarks is growing.

But PCM's Mr. Gillman warns that the 10 years of research in this area may prove to be too short a history upon which to demand hedging from investment managers. PCM does hedge both equity and fixed-income portfolios, and the results have been "gratifying," Mr. Gillman said. "But it may prove that the correct way to go is with a hedged benchmark but giving the manager an ability to unhedge" if, for example, the manager has a strong opinion the currency will appreciate significantly in the near term.

GTE Investment Management Co., Stamford, Conn., which manages the pension fund of GTE Service Corp., put into place a 50% hedged benchmark this year. Pamela McCann, pension fund vice president, said although this may encourage the investment managers to hedge portfolios, it still is a decision for the manager.

"We have not taken that discretion away," she said.

The increased interest also has prompted new hedging products. TIMCO is offering a synthetic quantitative currency overlay product that attempts to replicate a basket of currency options. Ms. Dowling said it seeks not only to respond to currency movements but also to correlate those with movements in the underlying securities. ■



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INVESTMENT MANAGEMENT INC.

Finance companies going on the prowl

Competition gives clients more choices

By Marcia Parker

Top 10 companies by revenue

	Revenue ($ mils.)		Return on equity (%)		Return on assets (%)		Total assets ($ mils.)	
	1989*	1988	1989*	1988	1989*	1988	1989*	1988
General Electric Capital Corp.	3,846	6,671	16.9	15.48	1.61	1.46	52,691	47,766
Comdisco Inc.	1,231	1,309	21.15	3.71	2.77	0.52	3,913	3,488
Household Finance Corp.	1,195.7	2,021.9	16.92	17.52	1.5	1.6	15,357.2	14,112.2
Associates Corp. of North America	1,146.3	2,008.8	19.35	20.35	2.33	2.48	13,546.9	12,623.6
Transamerica Financial Group Inc.	941.7	1,304.8	12.08	10.51	1.92	1.62	9,067.3	7,970.1
ITT Financial Corp.	851	1,461.9	15.55	15.69	1.74	1.68	9,760.2	8,998.8
American Express Credit Corp.	766	1,224	13.03	11.19	1.37	1.21	10,045	9,800
Beneficial Corp.	756.1	1,418	13.49	12.72	1.52	1.44	7,827.2	7,544
CIT Group Holdings Inc.	569.2	1,059.7	8.93	9.38	1.24	1.28	9,726.5	9,337.2
Avco Financial Services Inc.	566.1	1,047.2	17.69	11.42	2.59	1.69	4,240.1	4,173.1

*For six months ended June 30
Source: Standard & Poor's

Finance companies, often thought of as second-class providers of car, aircraft and equipment financing and the like, have been expanding their horizons. Some have made corporate finance a key thrust.

Westinghouse Credit Corp.'s national advertising campaign hawks its newly developed corporate finance dealmaking prowess, underscoring what has been an aggressive drive by finance companies to give investment and commercial banks, boutiques, insurance companies and utilities a run for mostly middle-market corporate customers as well as consumers seeking financial services.

Some arrange private placements, take equity stakes in companies they are helping to raise capital, finance leveraged buy-outs and do commercial real estate finance.

Although the competition is fierce because of the number of players and new entrants, continuing industry consolidation and pressure on profit margins, company financial officers and treasurers say they have reaped the rewards in the form of lower cost of capital and fees and a larger array of financial service providers from which to choose.

In a special report, Standard & Poor's Corp., the rating agency, took an in-depth look at finance companies, their activities and financial condition. While finance companies vary widely in relation to profitability, capital adequacy and funding and asset quality, S&P generally was upbeat about the industry, noting the rating trend for finance companies was admirable when contrasted with banks, their key competitors.

"The major challenge in the 1980s was competition, and it remains a primary challenge for the coming decade," the report said.

Company finance officials report they are experimenting more with a mix of financial service providers who offer innovative ideas, including finance companies. They say few are in the forefront like General Electric Capital Corp., which they consider an able competitor with leading investment and commercial banks. But finance companies are garnering a small but growing piece of the executives' business.

Some finance companies focus primarily on corporate business, including GE Capital; CIT Group Holdings Inc., a unit of Manufacturers Hanover Corp.; Heller Finance Inc., a unit of Japan's Fuji Bank; Household Finance Corp., a unit of Household International Inc.; and Westinghouse Credit and Greyhound Financial Corp.

The next tier offers a mix of commercial and consumer finance. Two examples are Associates Corp. of North America, which is owned by Ford Motor Co., and Barclays American Corp., a subsidiary of London's Barclays Bank. Some of the captive finance subsidiaries of auto and other companies — like General Motors Acceptance Corp., the largest finance company worldwide and the nation's second largest commercial banking company — are in business mainly to help their parent sell the goods and services it offers by providing cheap financing. But they, too, are expanding their activities.

GE Capital, a $52.7 billion diversified finance company based in Stamford, Conn., operates in 19 business activities from leveraged buy-out financing to auto fleet leasing. It is a leader in corporate finance, especially private placements and leveraged buy-outs. Equity positions taken by GE Capital as part of its leveraged buy-out financing activity have grown to a substantial size and are expected to make a large contribution to future earnings as gains are realized, S&P said. GE Capital lately has been on an acquisition binge, buying Gelco Corp., D&K Financial Corp. and Montgomery Ward Credit Corp. to bolster its presence in the auto leasing and retailer financing businesses.

Chicago-based Heller Financial, a $5.7 billion commercial finance company, concentrates on leveraged funding for leveraged buy-outs, debt restructuring and real estate financial services. About 35% of Household Finance's operations involve corporate finance. ITT Financial Corp., which does both commercial and consumer lending, has backed away from making commercial loans, especially for working capital, in light of competitive pressure. Now it is focusing on inventory financing for retailers and commercial real estate lending.

Los Angeles-based Foothill Group has a Foothill Capital Group that targets high-risk commercial borrowers and provides working capital loans to borrowers in Chapter 11 bankruptcy protection, known as debtor in possession financings. The firm recently has expanded its lending

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Equity requirement demanded

By Marcia Parker

A senior Wall Street economist is calling for establishment of mandatory equity capital requirements for large corporations to combat the shrinking of corporate equity and spur a slowdown in burgeoning corporate debt levels.

Alarmed by the rapid disappearance of equity in corporate America because of mostly debt-financed mergers and acquisitions, restructurings and a slew of stock buyback programs, Albert M. Wojnilower, managing director and senior adviser at The First Boston Corp., proposed a new "tool of control" be created to constrain corporate borrowing. A financial ratio approach similar to that already applied by lenders and bond rating agencies could be used, he told bankers and corporate executives attending a conference last month sponsored by the Federal Reserve Bank of Boston.

"Equity capital requirements for larger corporations are proposed as a simple, effective and market-oriented device. Such requirements seem a rather non-obtrusive way to check a trend that, unconstrained, leads to the back-door socialization of the economy," he said in the speech.

Mr. Wojnilower, who is well known in the financial community for interest rate forecasts that frequently have departed from the consensus, said the equity requirement should be "gentle — I visualize less than 1% of the regulated universe in initial violation — but satisfiable only by pure equity . . . The object of equity regulation is to compel a buffer such that firms will be forced, as it were, to weather a general downturn on their own resources."

To avoid "keeping the fire engine locked up while the city burns," he said the authorities must be allowed to lower the requirements when they see fit, but only across the board for macroeconomic reasons, not for individual cases.

The required ratios would have to be set at different levels for different firms, depending on their size and industry.

A twofold penalty for non-compliance would be simple and automatic. The lesser penalty would be the withdrawal of the tax advantage for the excess debt, which would mean the interest would be treated as though it were dividends. He said this would limit the tax incentive for equity retirement without radically revising the economy of our tax system.

Mr. Wojnilower suggested a more potent penalty would be compulsory dismissal of senior management, with forfeiture of things like equity entitlements and golden parachutes.

Albert Wojnilower said the capital requirement would constrain corporate borrowing.

He warned conference participants the shrinking equity in corporate America is taking the nation into a potentially much deeper "moral hazard morass" than did the Latin American loans or the savings and loan excesses.

"Now that heavily indebted companies are becoming typical, the risk is already serious that a shock, such as higher interest rates or a recession, could threaten enough household-name companies to form a critical, political mass," he said.

Mr. Wojnilower said it's dangerous to expect — in fact, almost rely on — the federal government to step in and bail out any ailing financial institution, agency or company.

"Just as we have seen the government rescue function extended, among others to Lockheed, Chrysler, New York City, the commercial paper market, government security dealers and most recently the stock market, so may we safely assume that public support would be invoked for any important group of corporate debtors in difficulty," he said.

"The risk we run by tolerating the attrition of equity is not primarily that of economic catastrophe but rather of massive government rescue operations that deeply politicize the economy."

In an interview following the conference, Mr. Wojnilower said his proposal so far hasn't drawn much debate. "It is a proposal in which there are very few losers. There are all sorts of advantages to the underwriters and investors," he said. ■

Leverage pulling at quality

CHICAGO — Rising leverage and the eroding quality of the equity component of the balance sheet of many finance companies has Duff & Phelps Inc. worried.

In a report on finance companies, the Chicago-based rating agency noted the balance sheet, notably leverage, has been the area of greatest change for finance companies this decade. Leverage — as measured by a firm's debt-to-equity ratio — has increased substantially for the industry, more than doubling in some cases, Duff & Phelps said.

The rating agency said improved asset quality provided some basis for the increase, but most recently the deterioration seems tied to increased competitive pressures.

"Higher leverage is now needed to maintain or improve returns on equity. The higher leverage and lower reserve position means there is less cushion to protect bondholders from adverse developments than in earlier years," the report states.

"The higher leverage is beginning to erode a major advantage the finance industry held over the banks from a rating perspective. While the finance companies have leveraged up, banks' leverage has fallen. Further, banking reserves have been increased while the finance companies' have declined."

Duff & Phelps also noted that close to 100% of a finance company's assets are loans, and virtually all liabilities are short- and long-term borrowings. Conversely, 75% to 80% of the typical banks' assets are loans, with short-term investments needed to enhance the banking system's liquidity constituting much of the remainder.

The quality of the equity component of the balance sheet is also being diluted. Companies such as Chrysler Financial Corp., General Electric Capital Corp., Heller Financial Inc., International Lease Finance and Westinghouse Credit Corp. have issued or plan to issue preferred stock to augment the equity base. The preferred does provide support to the debtholder and alleviate pressures on the debt-to-equity ratio. But leverage on common equity is increased, the rating agency said.

Profitability — as measured by return on equity — has been well maintained

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UPDATE

Banks get bigger slice

NEW YORK — Amid continuing consolidation in the investment banking area, investment banks lost ground to money center banks in privately placing debt and equity for corporations and public corporate bond underwritings in the first half of 1989, according to the Securities Industry Association.

While large investment banks handled 40% of the first half's $96 billion of private placement of debt and equity offerings, money center banks garnered a record 30% of private placement volume, followed by full line firms — firms that provide a full range of banking services — with 28%.

The rest was spread among the other players.

In all of 1988, however, large investment banks had significantly greater share — 45% — of the private placement volume. Money center banks and national full line firms each had about 27%, the SIA said.

In the public underwriting business, the investment banks lost more ground. A record 89% of 1989's corporate bond underwritings through the third quarter were done without syndication, up from 82% in 1988 and 21% in 1980.

The SIA also said risk-based capital from principal transactions such as trading and investments by brokerage firms for their own accounts; investment banking; and merger and acquisitions activities, account for a major and growing portion of securities industry revenue.

Analysis of first-half results shows that risk-based revenue accounted for 64% of industry revenue, up from 63% in 1988 and only 42% in 1980. The 10 largest investment banks, using their capital to follow a risk-based strategy, currently account for a third of industry revenue and capital, the SIA said.

Securities industry revenue tied directly to capital at risk has risen sharply since the start of the decade and inched ahead from 1988. As a result of the change in direction, commission revenue is becoming a less important factor.

The SIA estimates large investment banks captured 56% of mergers and acquisitions fees in 1988; national full line firms, 27%; and specialized boutiques, about 7% each. The remainder was distributed among all the other firms.

Japan eyes disclosure

TOKYO — Japan's securities firms are being asked for their views on the Japanese Ministry of Finance's proposal to require timely disclosure when someone purchases more than 5% of a corporation's shares.

The finance ministry is seeking to alleviate turmoil in the Japanese capital markets by putting a disclosure requirement in place. Government officials haven't decided which companies would be covered and what would have to be disclosed beyond the fact that the 5% stake was purchased.

In the United States, the Securities and Exchange Commission's requires buyers to file a form with the agency when a 5% stake in a public company is acquired.

Going on the prowl

Continued from page 35

activities to defaulted junk bond issues, a natural complement to its existing borrowing base.

Pittsburgh-based Westinghouse, with $8.7 billion in assets, shed its high-volume, low-margin financing business to concentrate on fee-based income and equity investments in corporate finance, real estate finance and merchant banking. It often takes an equity participation, thus capitalizing on the value-added quality of its corporate financing expertise. Westinghouse's commercial real estate operations have grown rapidly in recent years to $2.96 billion and 43% of total receivables in 1988 from $1.78 billion and 34% in 1985, according to S&P.

McDonnell Douglas Finance Corp., St. Louis, which long focused on aircraft and other equipment financing, has expanded to make commercial real estate lending an increasing focus. It also invests in junk bonds, with $50 million, or 2% of its assets invested in non-investment-grade bonds at year-end 1988, S&P said.

Textron Financial Corp., Providence, R.I., has moved from its traditional Textron Corp. parent-oriented focus to expand into corporate finance, vendor finance, capital investment and real estate finance. Englewood, Colo.-based U S WEST Financial Services Inc., a unit of U S WEST Inc., the communications firm, is a diversified equipment lease and sales financing company with plans to expand into other areas. Transamerica Finance Group Inc., San Francisco, has diversified by acquisition into commercial lending and insurance premium financing. U.S. Leasing International Inc. does all sorts of leasing as well as real estate lending and preferred stock investments. ■

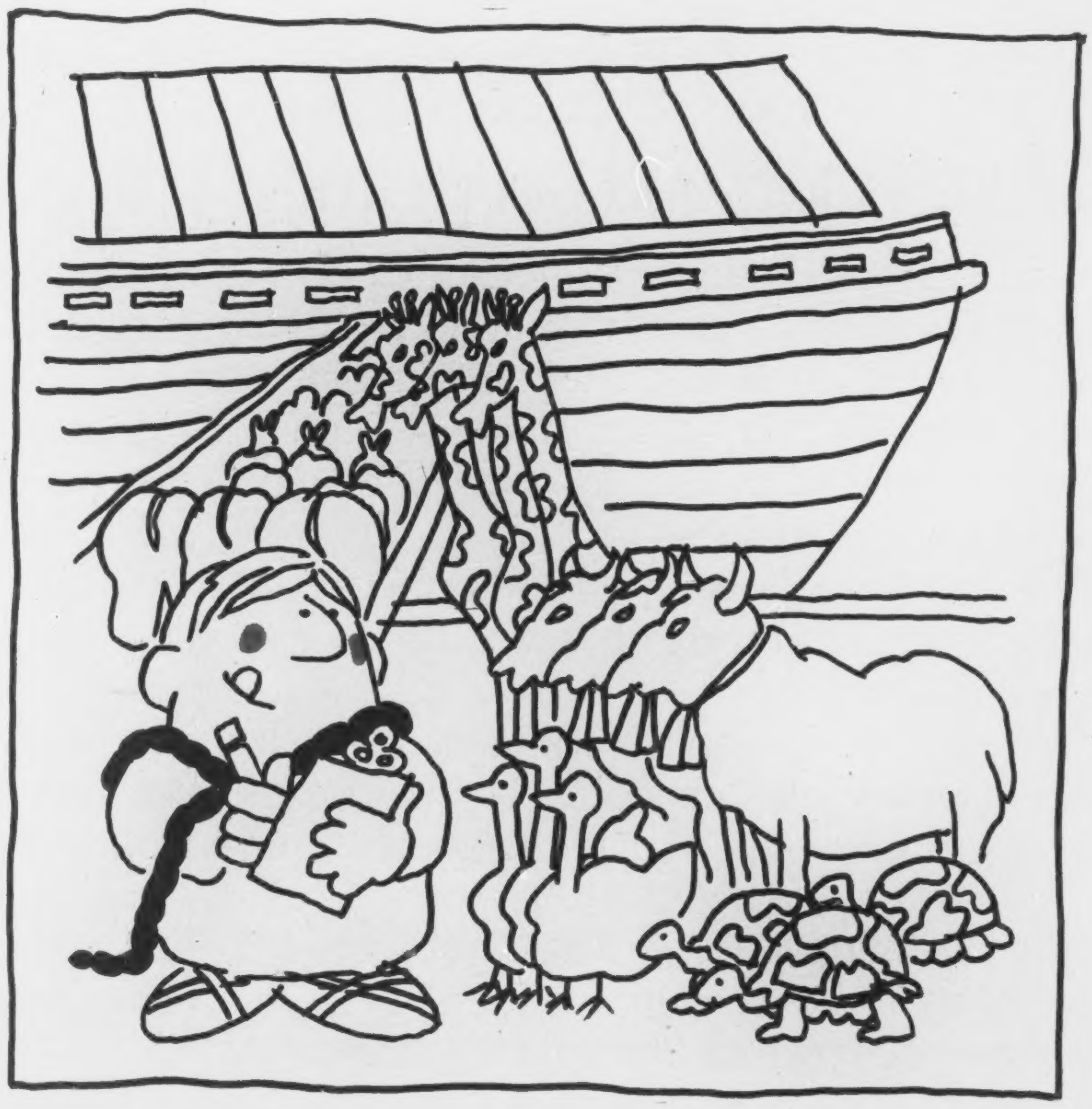
Leverage

Continued from page 35

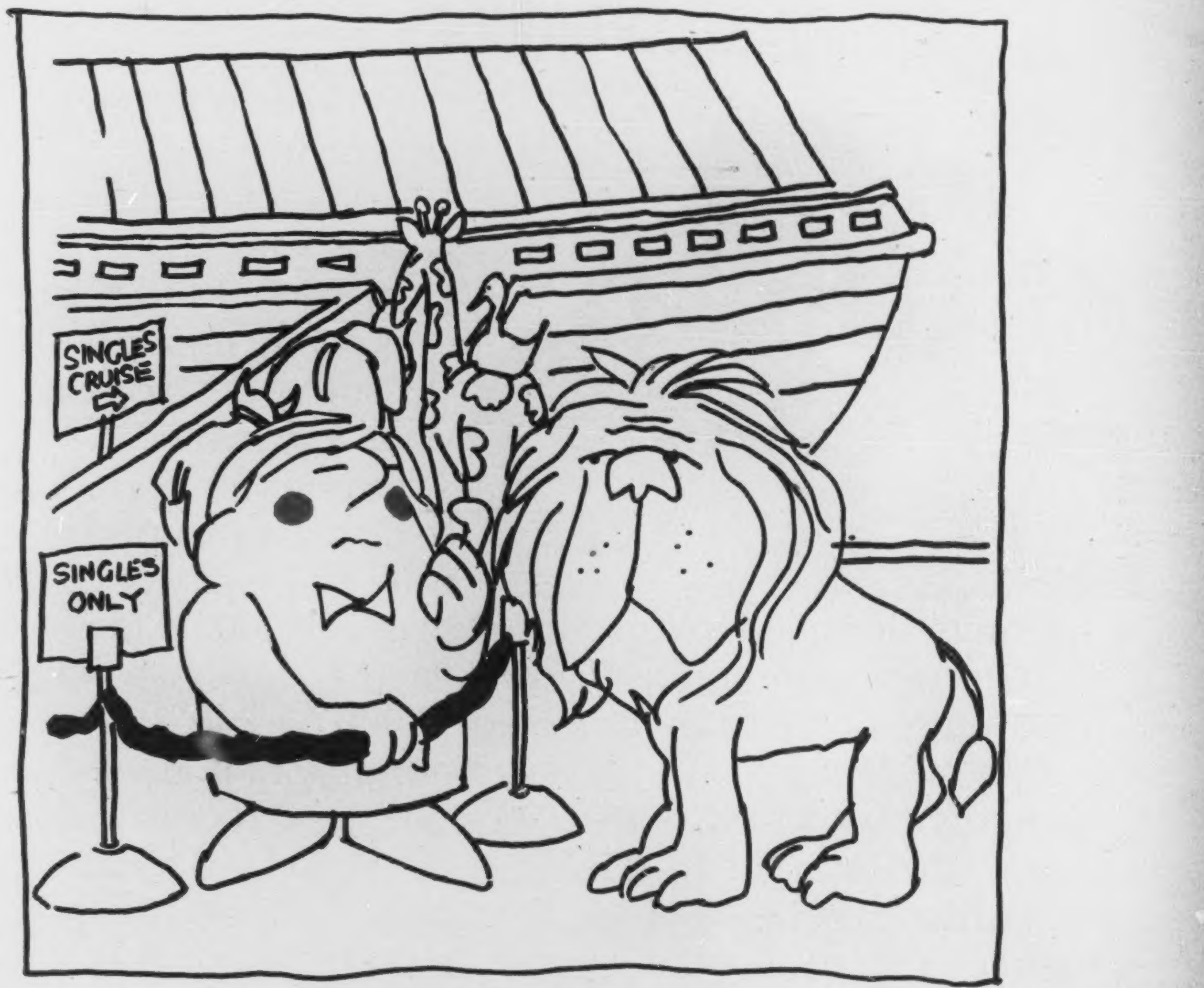
and often improved for the finance industry in recent years. There has been, however, a modest decline in return on assets reflecting changing conditions and leverage.

The returns on assets for the industry as a whole remain excellent relative to the banking industry. Careful attention to operating expenses and asset quality will be necessary to preserve this performance. A shortfall could lead to increased financial leverage to maintain returns on equity. Many companies in the industry have now reached a point where further increases in leverage could impact the ratings.

Increasingly banks and finance companies are pursuing the same customers, the elusive middle market. On the commercial side, banks have found it necessary to aim for small companies to replace the large corporate customers that found cheaper funding sources from commercial paper and public debt markets. At the same time finance companies have sought to upgrade their customer base, often targeting the same customers. The commercial customers of banks are now virtually indistinguishable from those of General Electric Capital, CIT, Heller Financial and Westinghouse Credit. ■



Overdiversified?



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Wary gamble in Japan

Venture capital funds blossom despite some hesitation

By Margaret Price

Although institutional investors are being greeted by a rising number of venture capital funds in Japan, at least some investors say they remain unsure or even chary about the attractiveness.

The Japanese venture capital industry has been gaining ground during the 1980s. Worldwide investments in Japanese venture capital opportunities has risen to as much as $3 billion as of the end of 1988, according to the Asian Venture Capital Journal, from almost nothing at the beginning of the decade. Yet, the Japanese venture capital industry remains small compared with the more than $31.1 billion invested in U.S. venture capital as of last year.

Japan's venture capital market does offer a variety of enticements. Besides the allure of investing in the strong economy of Japan, experts also cite such factors as expected continued growth of Japan's still small venture capital industry; the existence of a growing over-the-counter stock market, where close to 80 companies are expected to make initial public offerings this year; the relatively high multiples of Japanese stocks, which suggest potentially handsome returns can be reaped on venture capital investments; and some investors' perceptions that Japan offers an alternative to U.S. venture capital.

But problems and deterrents also loom. These range from perceptions that, in a downturn, Japan's small companies are the first to be hurt, to questions about the very viability of entrepreneurship in Japan.

"The Chinese tend to be more entrepreneurial than the the Japanese," said Robert Whyte, senior vice president at Mitchell Hutchins Institutional Investors Inc., New York. That means venture capital "investors might be better off in places like Hong Kong or Taiwan than in Japan."

Unlike the United States — where the entrepreneurial spirit is strong — many ideas in Japan historically emerged from big corporations and were nourished with the help of corporate research and development money. Exceptions have usually included family-owned businesses or suppliers to large corporations, who were protected by their customers.

Apparently no data exist on the level of U.S. investment in Japanese venture capital, but some industry experts say they believe the amount is relatively small compared with total U.S. investment in Japan.

One U.S. pension fund executive, who asked not to be identified, said he would not, in the foreseeable future, increase his outlay to Japanese venture capital beyond the current small investment in one fund. Among his complaints: since corporations are the more typical breeding ground for new ideas, venture capitalists have access to a reduced number of start-up ventures.

"Japan has no shortage of good ideas. There's just a shortage of new ideas available for venture capitalists," the executive said.

Investors also worry about returns from Japanese venture capital investments. Concerns stem from the fact few Japanese venture capital funds are more than 10 years old, meaning performance numbers generally are incomplete.

"That has to start being addressed to convince investors that this is a viable area," said Kevin S. Delbridge, director-partnership investments at John Hancock Venture Capital Management Inc., Boston.

"In general, we have seen funds off to a good start and doing well," he said.

Nicholas Ferguson, chairman of Schroder Ventures, London, said the firm's 4-year-old, $24 million Japanese venture capital fund, a limited partnership, is showing a compound annual return of about 25% as of June 30. "Our expectation is that the fund could make returns in the high 20s or low 30s."

In addition, the 4-year-old, $36 million Japan-America Venture Partners fund, of JAFCO America Ventures Inc., New York, "can get around a 20% compound annual rate of return," said Shoichi Fujikawa, president of JAFCO America. JAFCO is a general partner in the fund.

Such numbers look impressive when compared with returns from U.S. venture capital funds. According to Venture Economics Inc., Needham, Mass., venture capital funds formed in 1982 had a 1.3% five-year median internal rate of return and a valuation of 1.04 times paid-in capital; those from 1981 posted a 5.6% five-year median internal rate of return and a valuation of 1.29 times paid-in capital; and those from 1980 had a 20.5% five-year median internal rate of return and valuation of 2.1 times paid-in capital. Figures for funds less than 5 years old were not available.

Such successes lead many experts to expect continuing growth in the still-young Japanese venture capital industry and are helping to spawn more Japanese venture funds.

Schroder Ventures is trying to raise between $40 million and $50 million for a Japanese venture fund. Both Schroder funds are targeting such industries as high technology and consumer-related fields as well as management buy-outs and companies in later stages of development. Techno-Venture Co. Ltd., Tokyo, expects to have a second closing in early December on a $25 million to $35 million Primer Fund Group.

For Schroder, the new fund would be its second targeted to Japan; for Techno-Venture the new fund is its fifth Japanese venture capital fund and its first available to international investors, said James Hayashi, Techno-Venture's manager of the international financial services division.

The Primer fund will use a strategy called "corporate partnering." The fund would invest in companies, potentially anywhere in the world, that are willing to be acquired or accept some other financial arrangement, such as a joint venture. After making its investment, the fund would seek an investor, who eventually would buy out the fund's stake "at a certain multiple," explained Mr. Hayashi.

During a recent trip to the United States, Schroder Ventures' Mr. Ferguson was "pleasantly impressed with the degree of interest in the subject of venture capital in Japan," he said. While there wasn't a "huge market" in the United States for Japanese venture capital investments, interest "was above the level we expected."

Thus far, Schroder has signed up one unnamed U.S. foundation for its second Japanese venture fund. For his part, Mr. Hayashi expected Techno-Venture's new fund to be "oversubscribed" and said it includes unnamed investors from the United States (at least three), Japan, Europe and the Middle East. ■

Venture capital: Japan and the U.S.
($ millions)

	Japan	U.S.
Total venture capital assets	$2,170	$31,140
Assets invested	968	21,300
Assets raised in 1988	390	2,947
Assets invested in 1988	173	3,000
Number of venture capital firms	84	658

All figures are year-end 1988
Source: Schroder Ventures

MacKay-Shields starts global unit

NEW YORK — MacKay-Shields Financial Corp. will go global with the introduction of five investment products beginning Jan. 1.

Christina Seix, chief investment officer, said the decision to offer the global products — a passive global equity fund with active market and currency selections; passive global and international bond funds with active currency decisions; a fully hedged international bond fund; and a European convertible bond fund — was made soon after the firm conducted a survey on institutional investor attitudes for the 1990s.

Ms. Seix said the firm's business development plan expects to capitalize on the growing interest in international investing from pension funds, among others. The firm's strategy will use a disciplined, quantitative approach emphasizing solid fundamentals, she said.

The European convertible product would dovetail nicely with the move toward eliminating European trade barriers by 1992, she said, and the firm's expertise in the U.S. convertible market also should help.

She said the firm, with $6.2 billion assets under management — $5.2 billion tax exempt — most of it in domestic fixed-income, has tentative international commitments of almost $200 million from three clients, whom she declined to identify.

The new division will be headed by Michael Perelstein, who joined MacKay-Shields from his position as international equity strategist for Brinson Partners Inc., Chicago, formerly First Chicago Investment Advisors.

Mr. Perelstein becomes managing director of the new MacKay-Shields global division.

Mr. Perelstein, who began work at MacKay-Shields Nov. 6, had been at First Chicago for eight years.

"I leave with a lot of admiration for the firm," he said, but added the challenge of getting MacKay-Shield's global division off the ground was a big factor in his leaving.

"It's hard to match the ability to start something," he said.

At Brinson Partners, Susan O'Nan replaces Mr. Perelstein. Ms. O'Nan had been his assistant before moving to the asset allocation division as a multiple markets analyst, according to Richard Carr, Brinson Partners managing director. ■

Active managers near bogeys

By Curtis Vosti

Institutional investors continue to pump money overseas as active managers almost kept pace with indexes in the third quarter, according to two surveys.

The Financial Times-Actuaries Europe & Pacific Index returned 12.6% and the Morgan Stanley Capital International Europe Australia Far East Index returned 12.46% in the third quarter. (All benchmark returns are according to Pensions & Investments' Performance Evaluation Report.)

A survey of about 150 international and global managers by The World Markets Co., New York and Edinburgh, Scotland, indicates the median international manager of the 100 who responded returned 12.1% for the third quarter. The composite performance was 12.8%.

The returns reported by active international managers to the WM Co. survey ranged to 17.9% for the 5th percentile of reporting managers, from 9.6% for the 95th percentile.

The WM Global Composite, compiled from the 16 global managers responding to the survey, returned 11.1%, compared with the MSCI World Index return of 11.7% and the FT-A World Index return of 12%. The median return for the global managers surveyed was 11.8%.

The returns, plus added cash inflows, should boost U.S. institutional money invested overseas beyond the $70 billion mark, according to Duncan Fordyce, senior vice president at InterSec Research Corp., Stamford Conn.

Mr. Fordyce said the firm's research indicates continued growth in overseas investment. The firm conducts a quarterly survey of its universe of about 130 international managers.

"We see a continuation of the trend we saw at the start of the second quarter and continuing almost with a vengeance: a strong, net positive cash inflow," Mr. Fordyce said.

At the end of the second quarter, InterSec calculated U.S. institutional investors had $68 billion overseas.

That figure included a net cash inflow of $4.5 billion in the first half of 1989 and the same amount for all of 1988.

While the third quarter results are, for now, preliminary, Mr. Fordyce said at least $2 billion net cash flow had been added during the third quarter.

In the InterSec survey, the median active international equity manager returned 13.25% for the third quarter, again compared with an EAFE return of 12.46% and an FT-A EuroPac return of 12.6%.

In a commentary to its quarterly "Flash Report," the WM Co. said the perceived strength of the U.S. economy helped returns worldwide.

"Once again, Wall Street provided inspiration for the EAFE markets," the report noted. "Indications the U.S. would achieve sustainable, non-inflationary economic growth and thus avoid tipping into recession, boosted equity markets throughout the world."

The report stated that because index returns for the United Kingdom (12.2% in U.S. dollars, according to the FT-A Index), continental Europe (14.1%) and Japan (12.5%) were close to each other, asset distribution had a mostly neutral effect.

"Portfolios' results in individual markets were mixed, with managers beating the Japanese bogey yet again, offsetting below-index returns from the U.K. Exposure to Japan declined further and liquidity was also cutback, by about 2%," the WM report said. ■

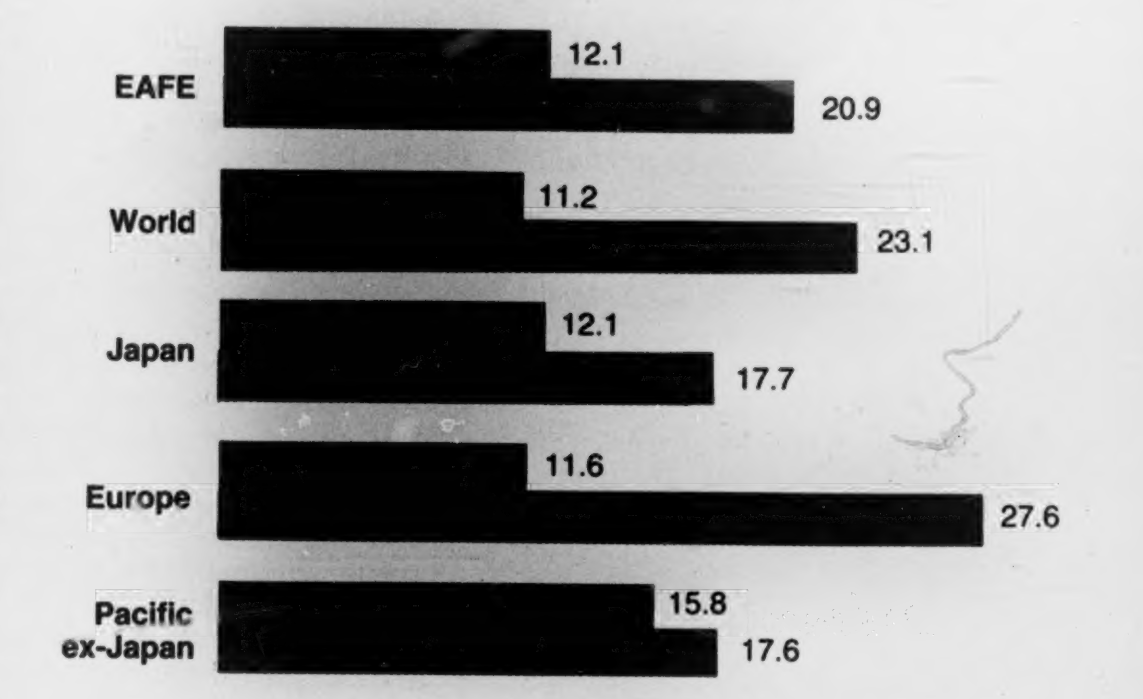
Median manager holdings in selected countries vs. the index weightings
(as of Sept. 30)

	Manager weighting	FT-A Euro-Pac weighting
Australia	3.5	2.11
France	6.8	4
W. Germany	7.5	4.77
Japan	35.7	63.8
Switzerland	5	1.73
U.K.	12.2	13.48

Sources: The World Markets Co. and Goldman, Sachs & Co.

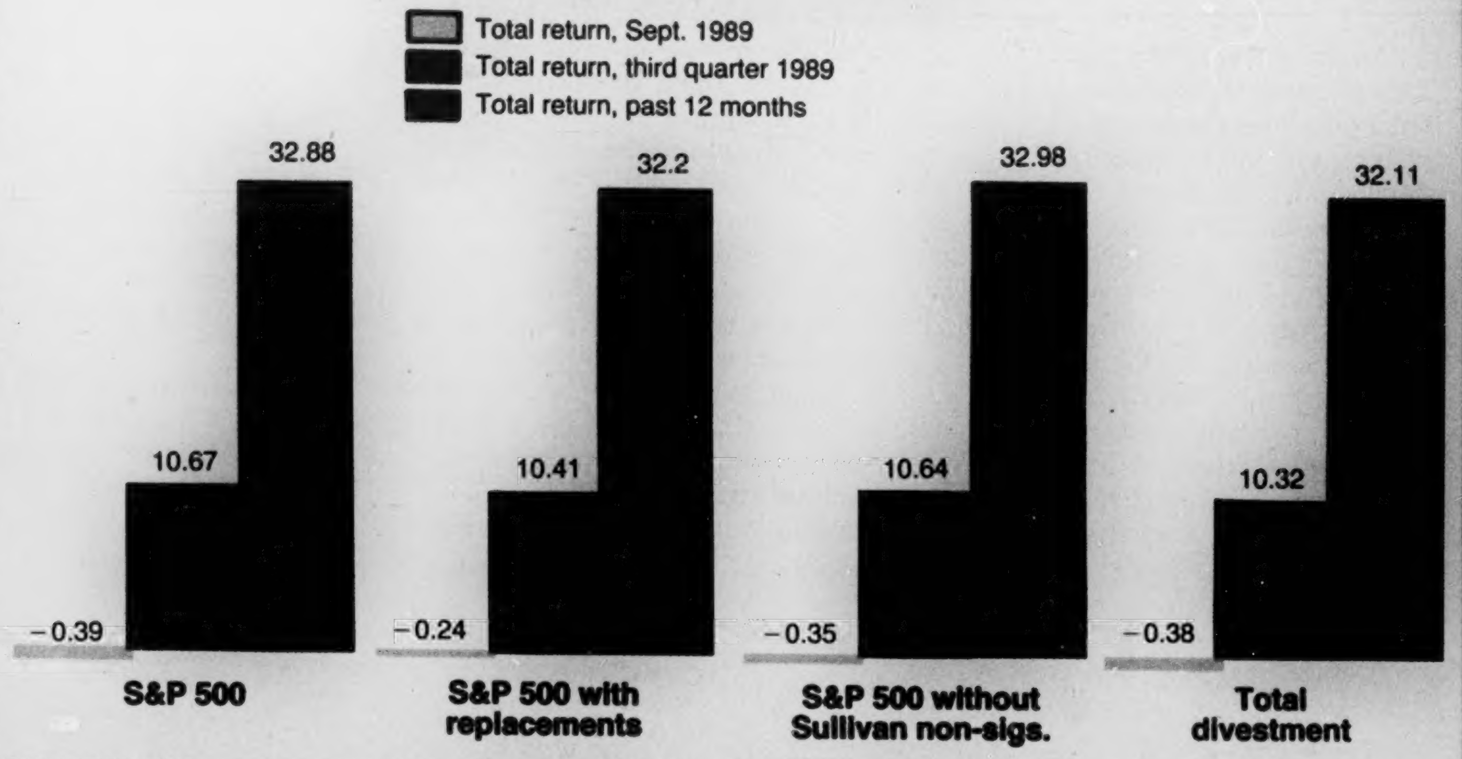
STATISTICALLY SPEAKING

Morgan Stanley Capital International worldwide indexes



Source: Morgan Stanley Capital International, New York
Indexes are in U.S. dollar terms without dividends reinvested

South Africa Free Index

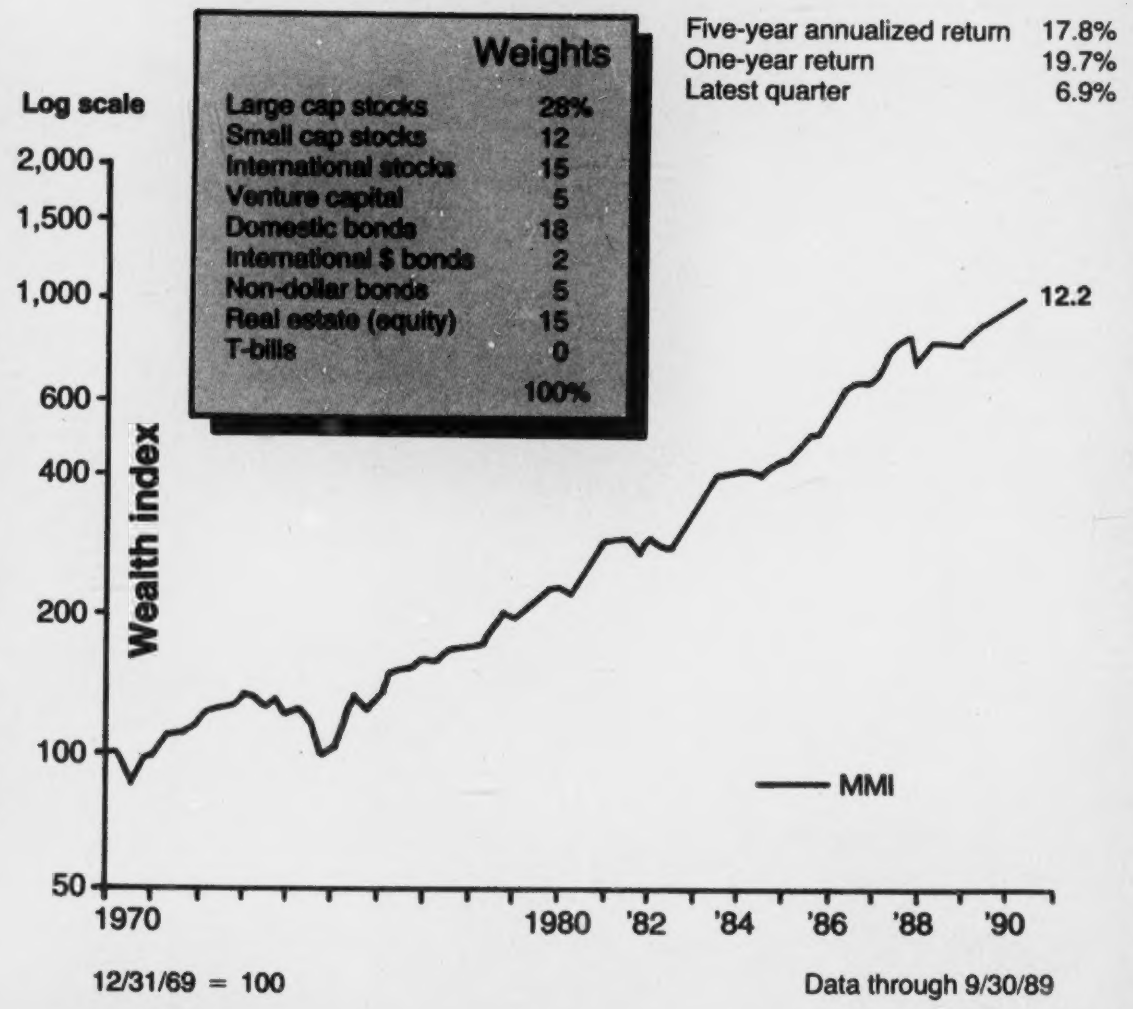


S&P 500 with replacements: replaces a South Africa-related company with next largest company in the industry. **S&P 500 without Sullivan non-signatories:** excludes 6 companies, no replacements. **Total divestment:** eliminates all companies with South Africa involvement, no replacements.

Source: Wilshire Associates, Santa Monica, Calif.

Multiple Markets Index

The Multiple Markets Index is a benchmark for total portfolio returns. It is composed of eight asset classes used by retirement plan executives; it is calibrated to reflect the same degree of risk of the typical pension portfolio; it uses passive fixed policy weights; and it represents the individual asset classes by the broadest and most complete market return data available.



Weights	
Large cap stocks	28%
Small cap stocks	12
International stocks	15
Venture capital	5
Domestic bonds	18
International $ bonds	2
Non-dollar bonds	5
Real estate (equity)	15
T-bills	0
	100%

Five-year annualized return	17.8%
One-year return	19.7%
Latest quarter	6.9%

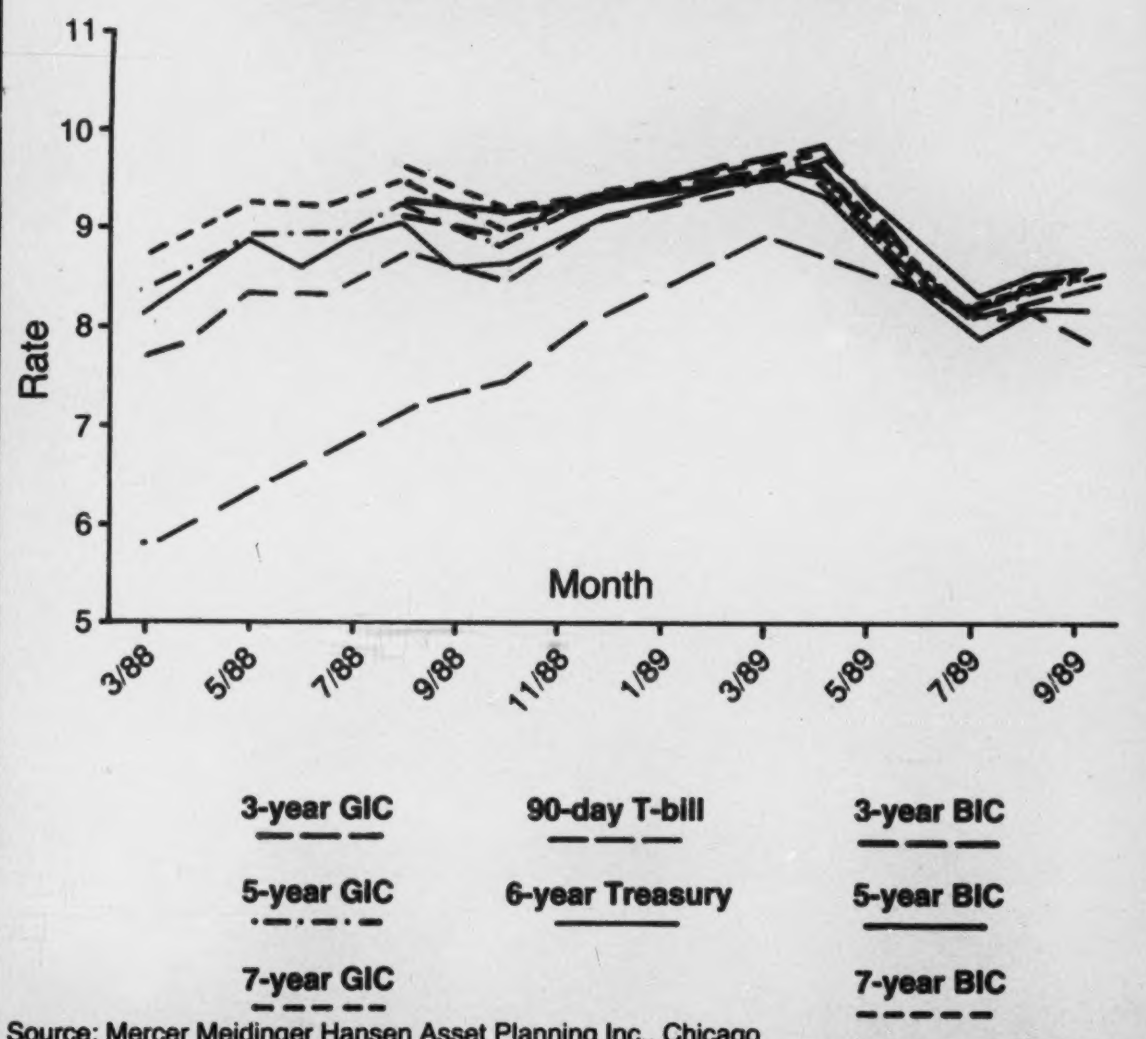
12/31/69 = 100

Data through 9/30/89

Source: First Chicago Investment Advisors, Chicago

Summary of average GIC & BIC data vs. market yields

(Bullet, compound $1 million contract)



Source: Mercer Meidinger Hansen Asset Planning Inc., Chicago

Third quarter 1989 returns

	Russell 3000®	Russell 1000®	Russell 1000® by market capitalization				Russell 2000®
			Large	Medium/large	Medium	Medium/small	
Technology	4.3%	4.2%	3.4%	5.9%	8.6%	0.7%	5.1%
Health care	16.5	16.5	13.3	27.5	14	12.2	16.1
Consumer discretionary	9.3	9.6	6.5	9.1	14.4	8.4	6.8
Consumer staples	10.4	10.7	12.9	7.1	11.4	9.5	4.1
Integrated oils	9.4	9.4	9	17.7	3.5	−2.6	19.5
Other energy	9.6	9.6	NA	11.4	8.6	7.1	8.9
Materials and processing	9.2	10	10.8	10.4	10.8	7.1	3.7
Producer durables	10.4	11	22.4	10.2	2.4	9.2	5.6
Auto and transportation	10.2	10.4	10.2	10.8	15.2	1.2	8.1
Financial services	12.8	13.3	14.9	16.5	10.4	12.5	6.7
Utilities	10.5	10.7	15.9	5.3	8.1	5.6	4.7
Total	10.1	10.3	10.7	10.8	10.4	7.9	6.8

Source: Frank Russell Co., Tacoma, Wash.

GIC yields bump upward

By Fred Williams

Yields on guaranteed investment contracts were up slightly during the third quarter, but quality spreads over comparable U.S. Treasury instruments were razor thin on some contracts.

The GIC yield curve returned to a slightly positive slope during the quarter from an inverted position in the second quarter, when the highest yield for a $1 million three-year compound contract was 10.2% and only 9.99% for the five-year contract, according to Peter Bowles, president of Fiduciary Capital Management Inc. For the third quarter, the three-year contract was 9.05% and the five-year contract, 9.1%.

"Clearly there still is no great incentive to go long," said Mr. Bowles.

Gary Mink, president of the Mink Organization, Rochester, N.Y., said spreads have narrowed to the extent that, in some cases, Treasury instruments were yielding more than a GIC for a one-year contract. The negative spread caused him to look at other, higher yielding instruments in which to deposit client assets until the yield curve returns to a more normal upward slope.

Mr. Mink said he has been placing some assets into bank certificates of deposit with one-year durations yielding about 9%.

Insurance company quotations on representative five-year, single-deposit, simple-interest, $1 million GICs as of Sept. 29 and June 30 as provided by Lamberson Knight GIC Inc., Short Hills, N.J., and GIC Inc., Beaverton, Ore., are:

- Allstate Life Insurance Cos., Northbrook, Ill.: Sept. 29, 9.01%; June 30, 7.86%.
- Canada Life Assurance Co., Toronto: 8.75%; 8.49%.
- Confederation Life Insurance Co., Atlanta: 8.95%; 8.62%.
- Connecticut Mutual Life Insurance Co., Hartford: 8.95%; 8.35%.
- Continental Assurance Co., Chicago: 8.79%; 8.44%.
- Crown Life Insurance Co., Toronto: 8.6%; 8.22%.
- Great West Life Insurance Co., Denver: 8.45%; 8.15%.
- Hartford Life Insurance Co., Hartford: 8.72%; 8.39%.
- Home Life Insurance Co., New York: 8.53%; 8.34%.
- John Hancock Mutual Life Insurance Co., Boston: 8.84%; 8.44%.
- Life Insurance Co. of Georgia, Atlanta: 8.65%; 8.6% (June 27).
- Life Insurance Co. of Virginia, Richmond: 8.82%: 8.41%.
- Lincoln National Pension Insurance Co., Fort Wayne, Ind.: 8.91%; 8.62% (June 27).
- Minnesota Mutual Life Insurance Co., St. Paul: 8.84%; 8.58%.
- Mutual Benefit Life Insurance Co., Newark, N.J.: 8.38%; 8.18%.
- Mutual of New York, New York: 8.64%; 8.28.
- New York Life Insurance Co., New York: 8.75%; 8.45%.
- Ohio National Life Insurance Co., Cincinnati: 8.97%; 8.6%.
- Pacific Mutual Life Insurance Co., Newport Beach, Calif.: 8.31%; 7.95%.
- Pan American Life Insurance Co., New Orleans: 8.98%; 8.59%.
- Penn Mutual Life Insurance Co., Philadelphia: 8.89%; 8.33%.
- Phoenix Mutual Life Insurance Co., Hartford, Conn.: 8.69%; 8.37%.
- Provident Mutual Life Insurance Co., Philadelphia: 8.67%; 8.39%.
- Provident National Life Assurance Co., Chattanooga, Tenn.: 8.01%; 8.06%.
- Southwestern Life Insurance Co., Dallas: 8.8%; 8.43%.
- State Mutual of America, Worchester, Mass.: 8.85%; 8.15%.
- Transamerica Life Insurance Co., Los Angeles: 8.52%; 8.4%.
- United of Omaha Insurance Co., Omaha, Neb.: 8.63%; no quote.

William M. Mercer Meidinger Hansen Asset Planning Inc., Chicago, surveys insurance companies for rate quotations and provided the following summary of various bullet GICs for September:

- Three-year, $1 million, compound: high, 9%; low, 7.49%; average, 8.42%.
- Three-year, $1 million, simple: high, 8.83%; low, 7.49%; average, 8.41%.
- Five-year, $1 million, compound: high, 9.25%; low, 7.98%; average, 8.6%.
- Five-year, $1 million, simple: high, 8.65%; low, 7.96%; average, 9.14%.
- Seven-year, $1 million, compound: high, 9.13%; low, 8.04%; average, 8.61%.
- Seven-year, $1 million, simple: high, 9.09%; low, 8.03%; average, 8.61%.
- Three-year, $5 million, compound: high, 9%; low, 7.69%; average, 8.5%.
- Three-year, $5 million, simple: high, 8.87%; low, 7.69%; average, 8.49%.
- Five-year, $5 million, compound: high, 9.25%; low, 8.22%; average, 8.65%.
- Five-year, $5 million, simple: high, 8.75%; low, 8.16%; average, 9.28%.
- Seven-year, $5 million, compound: high, 9.18%; low, 8.24%; average, 8.67%.
- Seven-year, $5 million, simple: high, 9.16%; low, 8.2%; average, 8.68%.

Dietrich & Associates, Blue Bell, Pa., provided the following rate spread data between a $1 million, five-year, simple-interest GIC and the average U.S. Treasury instrument of the same maturity during the third quarter:

- July 3: GIC, 8.7%; Treasury, 8%;
- Aug. 1: GIC, 8.05%; Treasury, 7.58%;
- Sept. 1: GIC 9%; Treasury, 8.27%.

Mercer Meidinger Hansen also surveys banks for rate quotations on their guaranteed instruments. Rate quotes for one- and three-year bullet BICs for September were:

- One-year, $1 million, compound: high, 8.7%; low, 8.08%; average, 8.42%.
- One-year, $1 million, simple: high, 8.7%; low, 8.28%; average, 8.28%.
- One-year, $5 million, compound: high, 8.75%; low, 8.21%; average, 8.49%.
- One-year, $5 million, simple: high, 8.75%; low, 8.26%; average, 8.56%.
- Three-year, $1 million, compound: high, 8.8%; low, 8.21%; average, 8.54%.
- Three-year, $1 million, simple: high, 8.83%; low, 8.44%; average, 8.63%.
- Three-year, $5 million, compound: high, 8.85%; low, 8.26%; average, 8.58%.
- Three-year, $5 million, simple: high, 8.88%; low, 8.31%; average, 8.67%. ■

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GMD is a division of American International Life Assurance Company of New York, a member company of American International Group, Inc.

Interest-sensitive stocks lead

By Trudy Ring

KANSAS CITY, Mo. — Stocks sensitive to interest rates led the market in the third quarter, while Yankee and foreign issues were the best performers among bonds, according to DeMarche Associates Inc.

Interest rate stocks, including utilities and financial services companies, gained 12% in price in the quarter, while the Standard & Poor's 500 Stock Index gained 9.7% in price gain only. Total return for the S&P 500 index was 10.7%. (Unless a stock return is identified as total return, the return reflects price gain only.)

For the 12 months ended Sept. 30, interest rate stocks gained 33.3% in price, compared with 27.5% for the index. The S&P 500's total return was 32.8%.

Stocks related to consumer spending, which led the market in the previous quarter, had the second best gain in the third quarter, with 9.8%. This sector is made up of companies in the food and beverage, tobacco, media, retail, lodging and restaurant industries. For the year ended Sept. 30, the group was up 39.3%, the best gain for this period.

Basic industry stocks gained 9.6% in the quarter. This category covers the metals, automotive, transportation and building materials industries. For the year, the sector gained 22.5%.

The energy and technology sectors each gained 7.6% in the quarter. The energy group, which includes domestic and international oil companies as well as oil service and equipment firms, gained 22.6% on the year. Technology, covering the aerospace, drug, electronics and office equipment industries, gained 15.8% on the year.

The top 10 industries for the quarter were forest products, up 40.2%; air transportation, up 31.6%; consumer non-durables, up 22.5%; finance, up 18.8%; tobacco, up 17.4%; containers, up 17.2%; telecommunications, up 15.5%; aluminum and copper, up 15.1%; drugs, up 15%; and insurance, up 14.1%.

The bottom 10 industries were auto parts and accessories, down 1.5%; consumer durables, up 0.01%; office equipment, up 0.2%; building materials, up 2%; electric utilities, up 3%; media, up 3.2%; electronics, up 3.4%; food packagers and processors, up 6.3%; automotive (cars and trucks), up 6.3%; and paper, up 7.2%.

The top 10 individual stocks were **UAL Corp.**, up 102.2%; **Squibb Corp.**, up 66.8%; **Nike Inc. Class B**, up 63.2%; **Holiday Corp.**, up 61.7%; **Oracle Systems Corp.**, up 58.8%; **Noxell Corp. Class B**, up 58.8%; **Tonka Corp.**, up 43.8%; **Golden West Financial Corp.**, up 43.1%; **Gap Stores Inc.**, up 42.1%; and **AMR Corp.**, up 41.5%.

DeMarche also analyzes stock performance by quality, growth and yield. As ranked by quality, below-average stocks had the quarter's best gain, 11.1%. Superior-quality stocks were up 10.6%; average, 9.4%; and above-average, 7.4%.

As categorized by growth, stocks in companies with moderate, stable growth had the best gain, 12%. Those with high, stable growth were up 10.4%; variable growth, 9.2%; and low, stable growth, 8.3%.

As ranked by yield characteristics, stocks in the lowest quartile of the yield range had the best price gain, 13.1%. Those in the second highest quartile were up 11.4%; in the third highest quartile, 10.8%; and in the highest quartile, 6.6%.

In the bond market, Yankee and foreign issues returned 2.8% in the quarter, while the DeMarche Pension Fund Bond Index of roughly 6,000 issues returned 1.8%. All bond figures are total return.

For the year ended Sept. 30, these issues returned 11.9%, while the index had 12.2%. Yankee and foreign bonds had the best return in the first quarter and the worst in the second quarter.

Canadian bonds returned 2.7% in the quarter and 13.7% in the year ended Sept. 30. Bonds issued by industrial companies returned 2.2% in the quarter and 11.8% on the year. Utility bonds returned 2.1% for the quarter and 13.2% for the year.

Telephone bonds were up only 1.7% in the quarter, but had the best return for the 12-month period, 14.1%, after having been the best performers in the second quarter.

U.S. government bonds trailed other sectors with a 1.1% return in the quarter. For the year, they were up 12.4%.

DeMarche also categorizes bond performance by quality, maturity and coupon rate.

As ranked by quality, A issues had the quarter's best return, 2.1%, compared with 2% for both BAA and AA issues and 1.3% for AAA bonds.

As grouped by maturity, bonds with maturities between one and five years had the best return, 2.1%. Those with maturities of 10 to 20 years and those with 20 years or more both returned 1.6%. Bonds with maturities of five to 10 years returned 1.7%.

As measured by quality and maturity combined, AA issues with 10- to 20-year maturities had the best return, 2.3%. Returns for other categories hovered around 2%.

Bonds with coupon rates of 2.9% and below provided the best total return, 4.8%. The weighted average coupon rate in the quarter was 9.7%. ■

Fund chooses Harris Bank for lending

BATON ROUGE, La. — The $350 million Municipal Police Employees Retirement System of Louisiana has selected Harris Trust and Savings Bank, Chicago, to manage its first venture into securities lending.

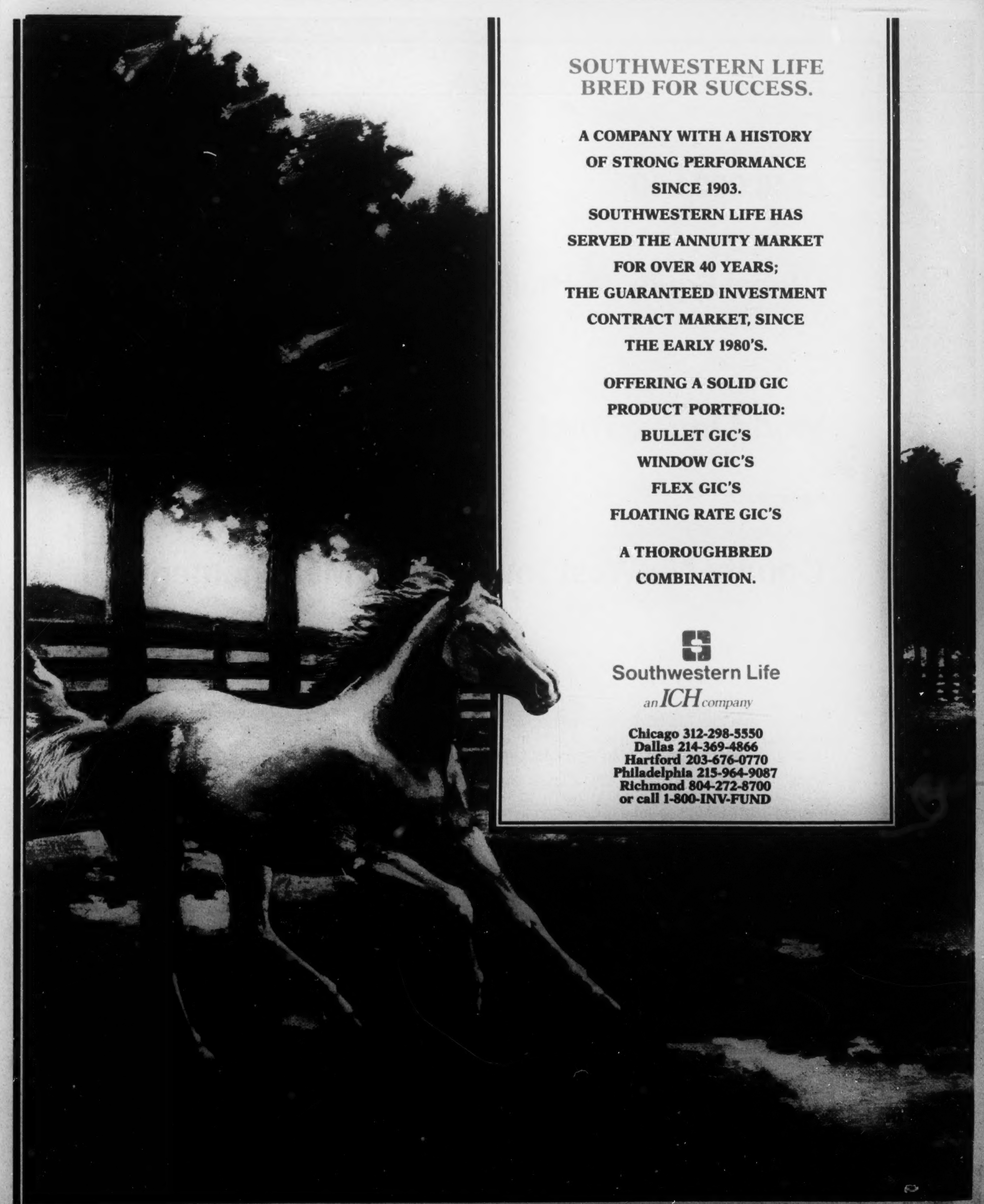
"We see other public funds doing this and it seems to provide a good source of additional income," said Jeanette Pendley, administrative director for the fund.

Ms. Pendley said the choice of Harris was made after sending proposals to 13 banks.

The fund is invested 16% in equities and the balance in fixed income.

Ms. Pendley said the fund's board of directors also decided to move toward increasing the equity stake to the 25% maximum set by state law.

SEI Corp. offices in Atlanta and Chicago assisted in the search.



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A

Analysis Group Inc.

18 Moore St., Belmont, Mass. 02178;
(617) 489-4200

Analysis Group Inc. provides proxy voting research and consulting to 15 tax-exempt institutions as well as to investment managers.

Significant changes or developments at the firm in the past year include the opening of an office in Washington.

Fees are payable in both hard and soft dollars.

James E. Heard, managing director, is the client contact.

The firm's subsidiary, AG Risk Management, provides asset allocation and manager selection consulting services. The client contact is Harin De-Silva, who may be reached at (714) 553-8099.

The institutional investment roundtable will be published in the Dec. 25 edition of *Pensions & Investment Age.*

B

Bailard Biehl & Kaiser Inc.

2755 Campus Drive, San Mateo,
Calif. 94403; (415) 571-5800

Bailard Biehl & Kaiser Inc. provides overall development of global asset allocation.

Of the nine tax-exempt clients on retainer, six are corporate and three are public.

There are four professional consultants. Fees are payable in hard and soft dollars.

The firm provides the following investment vehicles: separate account management, mutual funds and the BB&K International Fund.

Tax-exempt retainer clients include Bechtel, Ameritech, California Public Employees and Hughes Aircraft.

Brian E. Schaefer, vice president, is client contact.

BARRA

1995 University Ave., Suite 400,
Berkeley, Calif. 94704; (415)
548-5442

BARRA provides overall development of investment policies/objectives and of appropriate asset allocation. Performance measurement and additional analysis are offered for U.S., international, private placement, futures/options and GIC investments.

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The firm also offers global portfolio risk analysis and optimization; asset allocation tools; currency risk modelling; multiple manager analysis; normal portfolio construction and library; customized valuation and risk models; and seminars and newsletters.

The firm provides U.S. and international equity and fixed-income analyses; risk models of the world's major capital markets; and value-added consulting to the investment management industry.

The firm has special expertise in quantitative investment consulting.

Significant changes or developments at the firm in the past year include the opening of a Toronto office.

Of the 40 tax-exempt clients on retainer, 26 are corporate, 12 are public and two are foundation or endowment funds.

There are 80 professional consultants. Fees are payable in hard and soft dollars.

Barbara Hodges, manager of marketing communications, is client contact.

Beacon Hill Financial Corp.

19 Elm St., Cohasset, Mass. 02025;
(617) 383-2300

Beacon Hill Financial Corp. provides manager selection for venture capital, LBO and private placement investments. It also provides private market investment brokerage.

The firm provides private placement product development and distribution to the investment management industry.

The firm has special expertise in leveraged acquisition funds; restructuring funds; venture capital (domestic and international); and European/Asian acquisition funds.

Significant changes or developments at the firm in the past year include the development of a major fund to acquire European businesses.

The firm provided services to an estimated 50 long-term, non-retainer clients. The firm provided services to 25 non-retainer clients in the past year.

There are three professional consultants. Fees are payable in hard dollars.

Financial services provided are investment banking advice, brokerage and product development.

Robert F. Johnston, president, is client contact.

E.M. Beam & Associates

12813 E. Paul, Clovis, Calif. 93612;
(209) 299-4152

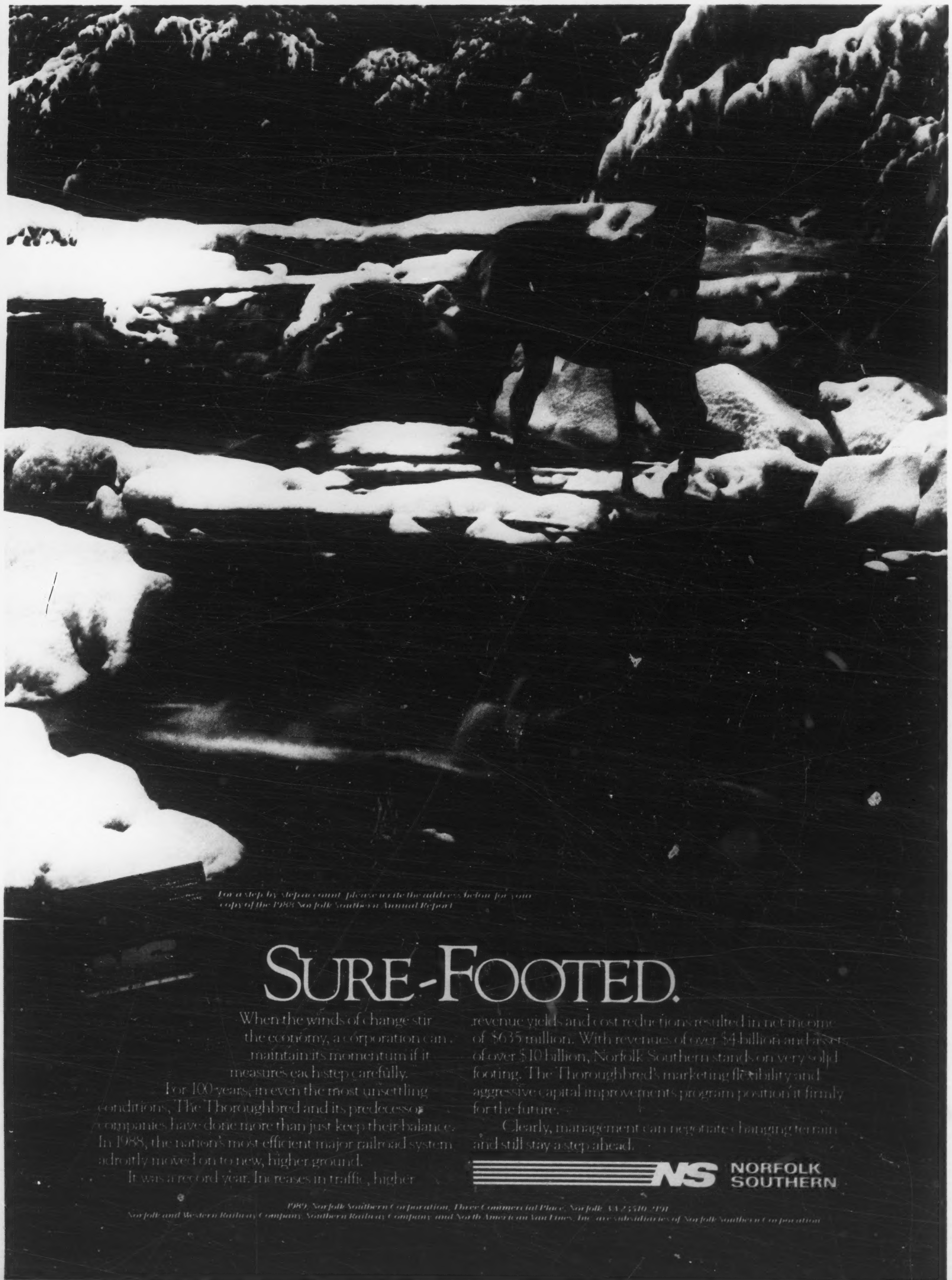
E.M. Beam & Associates, a subsidiary of Morgan Olmstead Kennedy & Gardner Inc., provides overall development of investment policies/objectives and of appropriate asset allocation; U.S. investment manager selection, performance measurement and additional analysis; and trustee/manager quarterly record resolution.

The firm has special expertise in simplified reporting to meet client needs.

There are two professional consultants. Fees are payable in hard and soft dollars.

Ed Beam, vice president-fiduciary information development, is client contact.

Social investing will be covered in the Nov. 27 issue of *Pensions & Investment Age.*



For a step by step account, please write the address below for your copy of the 1988 Norfolk Southern Annual Report.

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NS NORFOLK SOUTHERN

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Becker, Burke Associates

221 N. LaSalle, Suite 1000, Chicago,
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Becker, Burke Associates Inc. proides overall development of investnent policies/objectives and of approriate asset allocation. It provides nanager selection and performance neasurement for U.S. and internaional/global, real estate, venture capial, leveraged buy-out, private placenents, futures/options and GIC nvestments. In addition, Customized Performance Standards, performance-ased fees, manager structure conulting and performance attribution are ffered.

The firm provides performance evalation to the investment management ndustry.

It has special expertise in investment olicy, manager searches and perfornance evaluation.

Significant changes or developnents at the firm in the past year include the start of two new products: manager structure analyses and performance attribution.

Of the 31 tax-exempt clients on retainer, 12 are corporate, 13 are public, three are union and three are foundation or endowment funds. The firm also provided services to eight non-retainer clients in the past year, of which five were corporate and three were public.

There are four professional consultants. Fees are payable in hard and soft dollars.

Becker Burke also offers Blue Cross/Blue Shield reserve assets consulting services.

Tax-exempt retainer clients include Nalco Chemical, Chicago Municipal Workers, Perkin-Elmer and Vermont.

E.M. Burke, president, and H.H. Pohl and R.J. Surz, principals, are client contacts.

The Book of Lists will appear in the Dec. 25 issue.

Berg Fiduciary Consultants

363 Westchester Ave., Port Chester,
N.Y. 10576; (914) 937-7111

Berg Fiduciary Consultants Inc., an affiliate of Plan Sponsor Network Inc., provides overall development of investment policies/objectives and of appropriate asset allocation. Manager selection and performance measurement are offered for U.S., international/global, real estate, venture capital, futures/options and GIC investments. Additional analysis is offered for U.S. and international/global investments.

The firm also offers the Plan Sponsor Network's U.S. and global manager data bases.

The firm has special expertise in asset allocation, manager searches, performance measurement and tailored peer group universe ranking.

Significant changes or developments at the firm in the past year include the addition of Steven C. Case as a senior consulting principal.

Of the 14 tax-exempt clients on retainer, seven are corporate, five are union and two are foundation or endowment funds. The firm also provided services to two long-term, non-retainer tax-exempt clients during the past year, one corporate and one public.

There are two professional consultants. Fees are payable in hard and soft dollars.

Tax-exempt retainer clients include Atlanta Plumbers & Steamfitters, Insilco, LPL Technologies and White Plains Hospital.

Paul E. Berg, president, is client contact.

Berla Investment Consulting

43 Quail Court, Suite 108, Walnut
Creek, Calif. 94596; (415)
947-0326

Berla Investment Consulting provides overall development of investment policies/objectives and of appropriate asset allocation. Manager selection and performance measurement is offered for U.S., international/global, real estate, venture capital, LBO, private placement, futures/options and GIC investing. Additional performance analysis is available for U.S., international/global, LBO, private placement, futures/options and GIC investing.

The firm has special expertise in investment performance measurement and analysis.

Of the 20 tax-exempt clients on retainer, nine are corporate, three are public, five are union and three are foundation or endowment funds. The firm also provided services to two long-term, non-retainer clients, of which one is corporate and one is union.

One other corporate non-retainer client received services during the past year.

There are two professional consultants. Fees are payable in hard dollars.

Tax-exempt retainer clients include Merritt Peralta Medical Center, IBEW Local 100, Santa Barbara Savings & Loan and Valley Memorial Hospital.

George A. Berla is client contact.

Alan D. Biller & Associates

P.O. Box 30, Palo Alto, Calif.
94302-0030; (415) 328-7283

Alan D. Biller & Associates Inc. provides overall development of investment policies/objectives and of appropriate asset allocation. Manager selection and performance measurement is offered for U.S., international/global, real estate, venture capital, LBO, private placements, futures/options and GIC investing.

The firm also serves as plan fiduciary.

The firm provides licensing and sales of PensionOptions — a PC-based asset, contributions and asset/liability optimization software package — to the investment management industry.

The firm has special expertise in relating investment decisions to all other trustee concerns, including funding, plan design and operational efficiency.

There are two union clients on retainer. The firm also provided services to two non-retainer tax-exempt clients during the past year, of which one was corporate and one was union.

There are two professional consultants. Fees are payable in hard dollars.

Tax-exempt retainer clients are the Western Conference of Teamsters and ILWU-PMA.

Alan D. Biller is client contact.

Brentwood Asset Advisors

520 Broadway, Suite 250, Santa
Monica, Calif. 90401; (213)
393-8897

Brentwood Asset Advisors Inc. provides overall development of investment policies/objectives and of appropriate asset allocation. The [illegible] provides manager selection and additional performance analysis of GIC investing, placement of GIC/BICs and annuities, and portfolio, credit and contract analyses.

The firm provides placement of GIC/BIC contracts and portfolio, contract and credit analyses to the investment management industry.

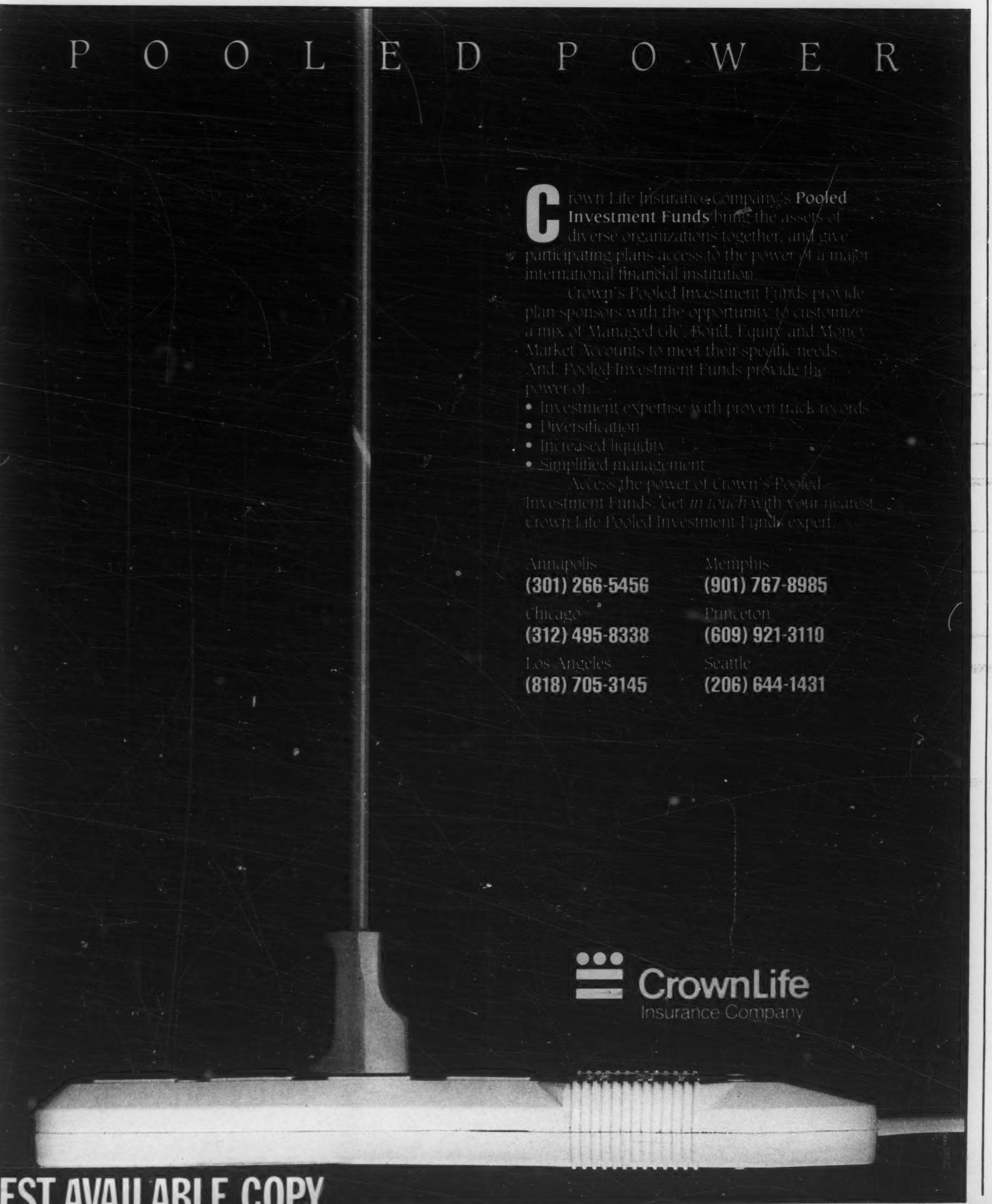
The firm has special expertise in GIC/BIC contract analysis, portfolio analysis and yield enhancement.

The firm has 10 corporate tax-exempt clients on retainer. The firm has 100 long-term, non-retainer clients, of which 85 are corporate, 15 are public and five, union. The firm also provided services to 150 other non-retainer tax-exempt clients during the past year, of which 130 were corporate, 15 were public and five were union.

There are five professional consultants.

Fees are payable in hard and soft dollars.

C. Jason Psome, senior vice president, is client contact.



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Suite 900, The Financial Center, 505
N. 20th St., Birmingham, Ala.
35203; (205) 250-5640

Brock/Daniels Group, a subsidiary of The Robinson-Humphrey Co. Inc., provides overall development of investment policies/objectives and of appropriate asset allocation. It offers U.S. manager selection, performance measurement and analysis. All reporting is provided monthly.

The firm has special expertise in serving middle market accounts, ranging from $1 million to $40 million.

Of the 50 tax-exempt clients on retainer, 46 are corporate and four are foundation or endowment funds. The firm also has 150 corporate long-term, non-retainer tax-exempt clients.

There are four professional consultants. Fees are payable in hard and soft dollars.

Tax-exempt retainer clients include Bruno's, Big B Drugs, Vulcan Materials and the Catholic Diocese of Memphis.

John G. Brock and George V. Daniels, senior vice presidents, are client contacts.

Buck Pension Fund Services

2 Pennsylvania Plaza, New York, N.Y.
10121; (212) 330-1248

Buck Pension Fund Services Inc., a subsidiary of Buck Consultants Inc., provides overall development of investment policies/objectives and of appropriate asset allocation. Manager selection is offered for U.S., international/global, real estate, venture capital, futures/options and GIC investing. Performance measurement is offered for U.S., international/global, real estate and venture capital services; and additional performance analysis is offered for U.S., international/global, real estate and GIC investing.

The firm provides construction of asset list normal portfolios to the investment management industry.

The firm has special expertise in asset/liability studies; equity and fixed-income performance analysis and attribution; total fund analysis; and GIC placement.

Of the 32 tax-exempt clients on retainer, 27 are corporate and five are public. The firm provided services to four long-term, non-retainer tax-exempt clients during the past year, of which three were corporate and one was a foundation or endowment fund. The firm provided service to 16 other corporate, non-retainer clients during the past year.

There are seven professional consultants. Fees are payable in hard and soft dollars.

William H. Overgard, director-investment consulting services, is client contact.

Profiles of the largest pension funds will be published in the Jan. 22 issue.

C

Callan Associates Inc.

71 Stevenson St., Suite 1300, San
Francisco, Calif. 94105; (415)
974-5060

Callan Associates Inc. provides overall development of investment policies/objectives and of appropriate asset allocation. It provides manager selection and performance measurement for U.S., international/global, real estate, venture capital, LBO, private placements, futures/options and GIC investing. Additional performance analysis is offered for U.S., international/global and real estate investing.

The firm also offers portfolio audit services; equity and fixed-income style analysis; performance attribution analysis; manager structure analysis; trading cost analysis; PC-based software planning tools; educational services; development of real estate guidelines and policy; real estate program administration and management; and development of international guidelines and policy.

The firm provides manager style analysis; investment measurement; portfolio monitoring; trading cost analysis; performance attribution analysis; presentation consulting; and special projects to the investment management industry.

The firm has special expertise in strategic planning; real estate program administration and management; international investment consulting; portfolio audits; educational services; nuclear decommissioning fund consulting; and transition management.

Significant changes or developments at the firm in the past year include the formation of Callan International Consulting Services division.

Of the 205 tax-exempt clients on retainer, 68 are corporate, 44 are public, 35 are union, 17 are foundation or endowment funds and 41 are in miscellaneous categories, including associations and hospitals. The firm also provided services to 26 non-retainer tax-exempt clients during the past year, of which 14 were corporate, six were public, two were union, one was a foundation or endowment fund and three were miscellaneous.

There are 27 professional consultants. Fees are payable in hard or soft dollars.

Ronald D. Peyton, president and chief operating officer, is client contact.

Cambridge Associates Inc.

1 Financial Center, Boston, Mass.
02111; (617) 439-3232

Cambridge Associates Inc. provides overall development of investment policies/objectives and of appropriate asset allocation. Manager selection and performance measurement is offered for U.S., international/global, real estate, venture capital, LBO, private placements, futures/options and GIC investing. Additional performance analysis is offered for all of the areas above, except GICs.

The firm also offers extensive investment and financial planning research reports to all clients.

The firm has special expertise in financial and investment consulting for non-profit institutions, as well as in its coverage of real estate, venture capital, global and other non-traditional asset classes.

There are 264 tax-exempt clients on retainer.

There are 23 professional consultants. Fees are payable in hard or soft dollars.

Tax-exempt retainer clients include Harvard University, Metropolitan Museum, MacArthur Foundation and the University of Texas.

David B. Thurston is client contact.

The Capital Control Group

750 Lake-Cook Road, Buffalo Grove,
Ill. 60089-2068; (708) 459-4770

The Capital Control Group Ltd. provides overall development of investment policies/objectives and of appropriate asset allocation. Manager selection is offered for U.S., international/global, real estate, venture capital and GIC investing. Performance measurement is offered for U.S., international/global and real estate investing, with additional performance analysis offered for U.S. and real estate investing.

The firm also consults on social and job-creating investments for Taft-Hartley and municipal plans.

The firm has special expertise in serving Taft-Hartley plans.

Significant changes or developments at the firm in the past year include the move to a larger building and the institution of a commission recapture program.

The firm has 42 long-term, non-retainer tax-exempt clients, of which 20

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are corporate, two are public and 20 are union. It provided service to 66 other non-retainer tax-exempt clients during the past year, of which 30 were corporate, one was public and 35 were union.

There are five professional consultants. Fees are payable in hard or soft dollars.

Financial services provided are investment banking, brokerage and employee benefit consulting, including health, life and disability insurance.

Tax-exempt retainer clients include Local 219 Plumbers and Pipefitters, Local 85 Plumbers and Pipefitters, RMH Associates and Bus.

Jay B. Rosen, president, is client contact.

Capital Trust Co.

4380 S.W. Macadam Ave., Suite 450,
Portland, Ore. 97201; (503)
228-2300

Capital Trust Co., a subsidiary of Harris & Harris Group Inc., provides overall development of investment objectives/policies and of appropriate asset allocation. It offers manager selection and performance measurement for U.S., international/global, real estate, venture capital and GIC investing. Tactical asset allocation consulting also is offered.

The firm has special expertise in strategic asset allocation and the development and implementation of investment policy.

Significant changes or developments at the firm in the past year include the addition of Nancy L. Jacob as a vice president.

Of the nine tax-exempt clients on retainer, five are corporate, two are public and two are foundation or endowment funds. The firm also provided services to three corporate non-retainer tax-exempt clients during the past year.

There are three professional consultants. Fees are payable in hard dollars.

The firm offers 11 pooled funds managed by outside investment advisers.

Plan administration services also are offered.

Tax-exempt retainer clients include Colorado Public Employees, Pacific Power & Light, Red Lion Inns and Payless Drug Stores Northwest.

Ralph C. Rittenour Jr., managing director, and Karen H. Sheridan, vice president, are client contacts.

The Carmack Group Inc.

201 S. Lake Ave., Suite 403,
Pasadena, Calif. 91101; (818)
449-0721

The Carmack Group Inc. provides overall development of investment policies/objectives and of appropriate asset allocation. Manager selection and performance measurement is offered for U.S., international/global, real estate, venture capital, futures/options and GIC investing. Additional performance analysis is offered for U.S., real estate, venture capital, futures/options and GIC investing.

The firm also offers development of relevant benchmarks and normal portfolios.

The firm provides performance measurement and the development of relevant benchmarks and normal portfolios to the investment management industry.

The firm has special expertise in the development of relevant benchmarks and analytical analyses.

Significant changes or developments at the firm in the past year include the completion of comprehensive analyses of TAA/AAA portfolios and convertible securities portfolios.

Of the 20 tax-exempt clients on retainer, 17 are corporate and three are foundation or endowment funds. The firm has four corporate, long-term, non-retainer tax-exempt clients, and also provided services to one foundation or endowment non-retainer tax-exempt client during the past year.

There are 12 professional consultants. Fees are payable in hard or soft dollars.

Tax-exempt retainer clients include the California Institute of Technology, The Common Fund, Loyola Marymount University and Lear Siegler Diversified Holdings.

James A. Carmack, president, is client contact.

CDA Investment Technologies Inc.

1355 Piccard Drive, Rockville, Md.
20850; (301) 975-9600

CDA Investment Technologies Inc., a subsidiary of The Thomson Corp., provides overall development of appropriate asset allocation. It offers U.S. manager selection and performance measurement and analysis. It also offers performance measurement and analysis for international/global investment.

The firm provides guidance in asset allocation development; U.S. manager evaluation; and domestic performance measurement and analysis to the investment management industry.

The firm has special expertise in online and PC systems, and performance measurement and universe comparisons.

The firm has 195 long-term, non-retainer tax-exempt clients, of which 180 were corporate, eight were public, three were union and four were foundation or endowment funds.

Thee are 15 professional consultants. Fees are payable in hard or soft dollars.

James Warren, vice president, is client contact.

Collins Associates

840 Newport Center Drive, Newport
Beach, Calif. 92660; (714)
644-5771

Collins Associates provides overall development of investment objectives/policies and of appropriate asset allocation. Manager selection and performance measurement and analysis are offered for U.S., international/global, real estate, venture capital, LBO, futures/options and GIC investing.

The firm also offers consulting services on pre-funding of post-retirement health care benefits.

The firm has special expertise in researching the entire universe of investment managers, with specialized research on the high-performing, small investment manager.

Of the 20 tax-exempt clients on retainer, 16 are corporate and four are foundation or endowment funds.

There are nine professional consultants. Fees are payable in hard dollars.

The firm manages investment managers for clients on a discretionary, as well as advisory, basis.

Tax-exempt retainer clients include FMC, Sunkist Growers, the University of Texas and Xerox.

Donald W. Leahy is client contact.

Colonial Consulting Corp.

610 Fifth Ave., Suite 420, New York,
N.Y. 10020; (212) 307-1830

Colonial Consulting Corp. Inc. provides overall development of investment policies/objectives and of appropriate asset allocation. Manager selection and performance measurement and analysis are offered for U.S., international/global, real estate, venture capital, LBO, private placements, futures/options and GIC investing.

The firm also offers special analyses, including research papers, selected manager data bases, customized graphs and reports, and forecasting models.

The firm provides an endowment and foundation data base/index to the investment management industry.

The firm has special expertise in endowment and foundation investment policy issues and investment manager/bank custody account reconciliation.

The firm has 12 tax-exempt clients

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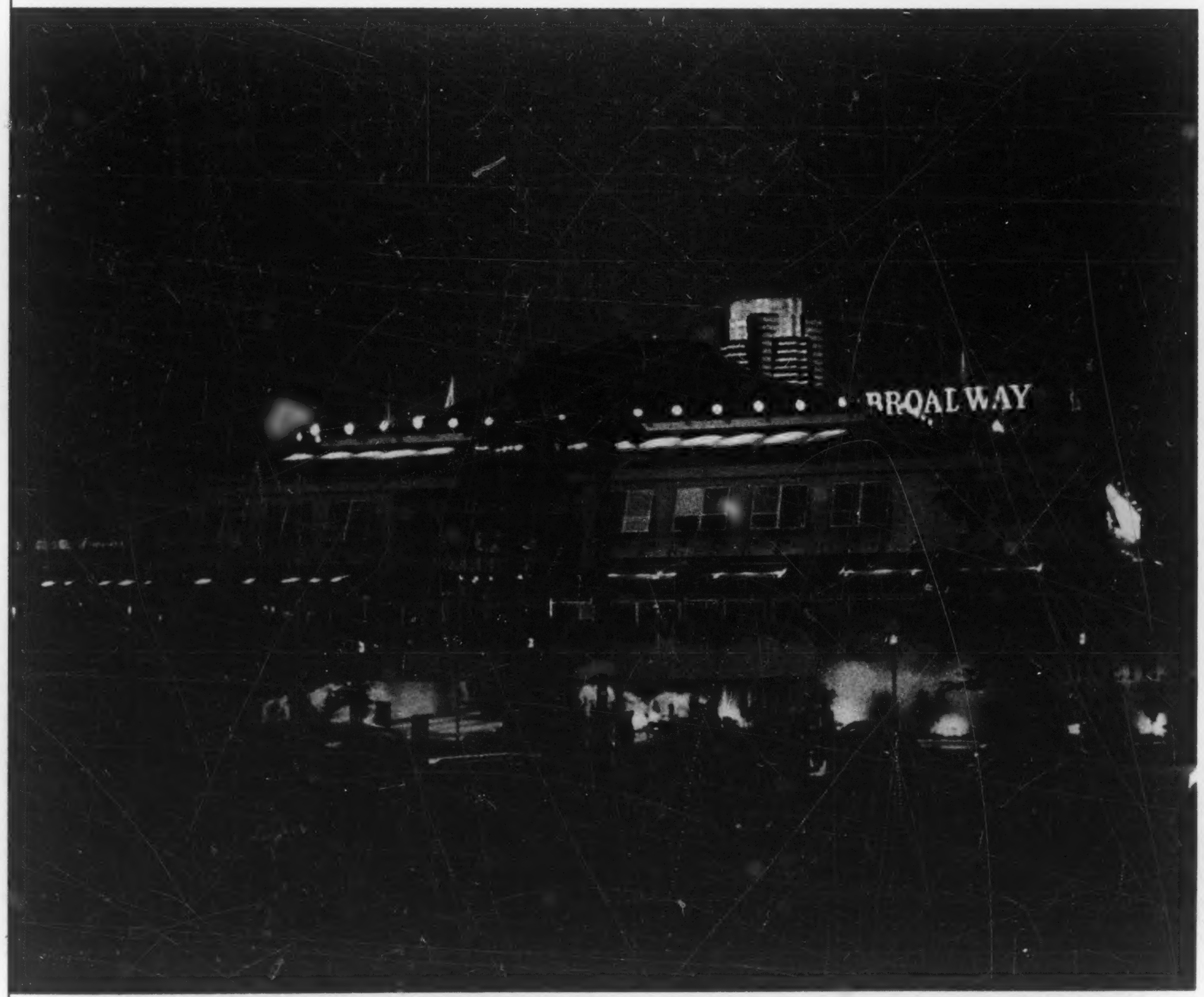

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Adding value to our clients' portfolios through the management, acquisition and disposition of real estate has been the RREEF Fund's goal since our founding in 1975.

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Paul Sack
(415) 781-3300

Chicago
Donald A. King, Jr.
(312) 266-9300

New York
Peter Steil
(212) 688-3900

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Real Estate. Real Results.

on retainer.

There are eight professional consultants. Fees are payable in hard or soft dollars.

John Goodrich, president; Steve Grant, director of manager evaluations; and Beth Cash, consultant, are client contacts.

Consulting Services Group

80 Monroe Ave., Suite 800, Memphis,
Tenn. 38103; (901) 525-8080

Consulting Services Group Inc., a subsidiary of Furman Selz Mager Dietz & Birney — a Xerox Financial Services company — provides overall development of investment policies/objectives and of appropriate asset allocation. It provides manager selection and performance measurement and analysis for U.S., international/global, real estate, futures/options and GIC investing. Venture capital and private placements performance analysis is done on client request.

The firm provides preparation of quarterly investment adviser performance reports to the investment management industry.

The firm has special expertise in goal and objective setting; asset allocation study, recommendation and implementation; performance measurement reporting; historical reviews; and investment adviser search and selection processes.

Significant changes or developments in the past year include the addition of 14 employees and the opening of an office in Savannah, Ga.

Of the 26 tax-exempt clients on retainer, eight are corporate, nine are public and nine are foundation or endowment funds. There are nine long-term, non-retainer tax-exempt clients, of which eight are corporate and one is union.

There are 10 professional consultants. Fees are payable in hard or soft dollars.

Tax-exempt retainer clients include Shelby County Retirement Systems, Memphis Light Gas and Water, Chattanooga Fire and Police, and the Electric Power Board of Chattanooga.

Fred J. Hodges, managing director, is client contact.

D

Dahab Associates Inc.

52 Nassau Ave., Islip, N.Y. 11751;
(516) 277-8301

Dahab Associates Inc. provides overall development of investment policies/objectives and of appropriate asset allocation. Manager selection and performance measurement and analysis is offered for U.S., international/global, real estate, venture capital and GIC investing.

The firm has special expertise in customized computer models and customized performance measurement reports.

Of the 30 tax-exempt clients on retainer, 13 are corporate, five are public, eight are union and four are foundation or endowment funds. There are two foundation/endowment long-term, non-retainer clients. The firm also provided services to one corporate non-retainer tax-exempt client during the past year.

There are two professional consultants. Fees are payable in hard or soft dollars.

Tax-exempt retainer clients include the Guideposts, the Pennsylvania Municipal Retirement Board, SONAT and Norfolk Employees.

Richard E. Dahab, president, is client contact.

The directory of investment advisers will be published May 21.

Dain Bosworth Investment Management Group

100 Dain Tower, Minneapolis, Minn.
55402; (612) 371-2707

Dain Bosworth Investment Management Group, a division of Dain Bosworth Inc., provides consulting services through its network of approximately 80 brokers.

Overall development of investment policies/objectives and of appropriate asset allocation is offered. Manager selection and performance measurement are offered for U.S., international/global and GIC investing.

Significant changes or developments in the past 12 months include the addition of two professional consultants and an updated data base.

The group has 15 professional consultants, offering services to 138 retainer and 284 long-term, non-retainer, tax-exempt clients.

These totals do not include the figures reported below.

Fees are payable in hard or soft dollars.

Betsy Swiderski, vice president-financial services, is client contact.

Additional consulting services are offered through three subsidiaries.

- Asset Management Search Consultants offers overall development of investment policies/objectives and of appropriate asset allocation. U.S. manager selection and performance measurement is offered. In addition, risk tolerance, FASB 87 compliance and performance attribution services are provided. The firm has special expertise in asset allocation.

The firm has 13 tax-exempt clients on retainer, of which 12 are corporate and one is a foundation or endowment. Tax-exempt retainer clients include Criton, Westmark International, Lutheran Bible Institute and Allied Body.

The group has one professional consultant.

Stephen L. Kessler, vice president, is client contact at (206) 462-5062.

- The Investment Management Consulting Group offers overall development of investment policies/objectives and of appropriate asset allocation. Manager selection and performance measurement is offered for U.S., international/global and GIC investing. The firm also offers portfolio optimization studies and corporate cash management consulting. It specializes in tactical asset allocation and corporate cash investing.

There are 30 tax-exempt clients on retainer, of which 19 are corporate, one is union and nine are foundation/endowment.

The firm also has 50 long-term, non-retainer tax-exempt clients, of which 49 are corporate and one is foundation/endowment.

Clients include GI-Joes, MARCO, PENWEST and United Finance.

The group has three professional consultants.

Tony Arnerich and Bryn Torkelson, vice presidents, are client contacts at (503) 241-7558.

- Money Manager Consulting Group offers overall development of investment policies/objectives and of appropriate asset allocation. Manager selection and performance measurement and analysis is offered for U.S., international/global, futures/options and GIC investing. The firm also provides determination of risk levels and performance attribution.

It offers the ability to trade on the institutional desk at zero transaction cost to the investment management industry.

The firm specializes in cash reserve management.

There are 26 tax-exempt retainer clients, of which 25 are corporate and one is union. It also provided services during the past year to 113 tax-exempt non-retainer clients, of which 69 were corporate, 41 were public, one was union and two were foundation/endowment.

The group has three professional consultants.

Tom Wede, managing principal, is client contact at (206) 462-5061.

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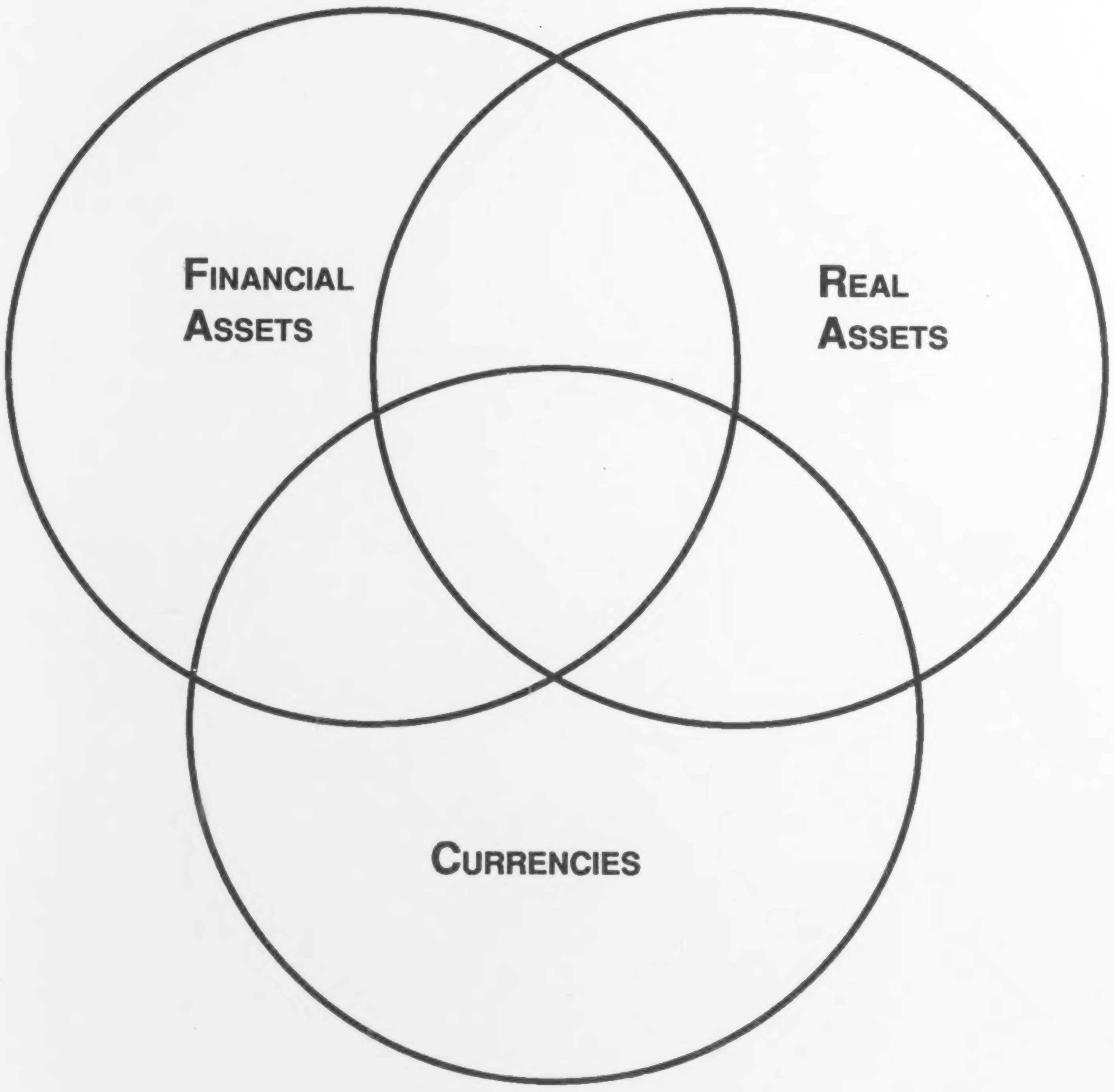

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CHASE

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Davies Investment Associates Inc.

P.O. Drawer 56246, 215 Piedmont
Ave. N.E., Suite 1009, Atlanta, Ga.
30343; (404) 525-7541

Davies Investment Associates Inc. provides overall development of investment policies/objectives and of appropriate asset allocation. Manager selection is offered for U.S., international/global, real estate and GIC investing. Performance measurement is available for all these services except GIC consulting. Performance analysis is available for U.S. investing.

Of the 10 tax-exempt clients on retainer, five are corporate and five are public. There are 15 long-term, non-retainer tax-exempt clients, of which seven are corporate and eight are public. The firm provided services to three other non-retainer tax-exempt clients during the past year, of which one was corporate and two were public.

There is one professional consultants. Fees are payable in hard or soft dollars.

Tax-exempt retainer clients include Browning-Ferris Industries, City of Sioux Falls and the City of Wichita.

James J. Davies is client contact.

DeMarche Associates Inc.

1900 W. 47th Place, Suite 300,
Westwood, Kan. 66205; (913)
384-4994

DeMarche Associates Inc. provides overall development of investment policies/objectives and of appropriate asset allocation. Manager selection and performance measurement is offered for U.S., international/global, real estate, venture capital, LBO and GIC investing.

The firm provides performance evaluation and performance comparison data within managers' peer or style groups to the investment management industry.

The firm has special expertise in research, particularly in performance attribution.

Of the 138 tax-exempt clients on retainer, 68 are corporate, 26 are public, eight are union and 36 are foundation or endowment funds.

There are 18 professional consultants. Fees are payable in hard or soft dollars.

Tax-exempt retainer clients include Baxter International, Emerson Electric, Inland Steel and Missouri Public School Retirement.

Steve Farrell, vice president, is client contact.

Dorn Helliesen Inc.

300 Tamal Plaza, Suite 270, Corte
Madera, Calif. 94925; (415)
924-1200

Dorn Helliesen Inc. provides overall development of investment policies/objectives and of appropriate asset allocation. Manager selection and performance measurement and analysis are offered for U.S., international/global, real estate, venture capital and GIC investing.

The firm places emphasis on evaluation and analysis as a fiduciary; traditional portfolio management is de-emphasized.

The firm has special expertise in policy and guidelines, and manager searches and evaluations.

Of the 12 tax-exempt clients on retainer, seven are corporate, four are public and one is union. There are six long-term, non-retainer tax-exempt clients, of which four are corporate, one is public and one is union.

There are five professional consultants. Fees are payable in hard dollars.

Tax-exempt retainer clients include Idaho, Contra Costa County, Albertsons and the Retail Clerks of Washington.

Robert Helliesen, principal, is client contact in the California office. Douglas Dorn, principal, is client contact in the Boise, Idaho office, at (208) 344-9200.

E

Effron Enterprises Inc.

363 Westchester Ave., Port Chester,
N.Y. 10573; (914) 939-0200

Effron Enterprises Inc. provides manager selection and performance measurement and analysis for U.S. and international/global investing. Performance measurement and analysis also is offered for futures/options and GIC investing.

The firm also offers statistical analysis, hybrid and customized indexes and portfolio strategies.

The firm provides performance measurement analysis, portfolio accounting, customized projects and manager data bases to the investment management industry.

The firm has special expertise in performance measurement, portfolio accounting, international investment theory and customized investments.

Significant changes or developments at the firm in the past year include the development of analysis and support for small funds.

The firm provided services to 130 non-retainer tax-exempt clients during the past year, of which 118 were corporate, six were public, one was union and five were foundation or endowment funds.

There are seven professional consultants. Fees are payable in hard or soft dollars.

Stephen J. Klein, vice president, is client contact.

Ennis, Knupp & Associates

10 S. Riverside Plaza, Suite 700,
Chicago, Ill. 60606; (312) 715-1700

Ennis, Knupp & Associates provides overall development of investment policies/objectives and of asset allocation. Manager selection and performance measurement and analysis is offered for U.S., international/global, real estate, venture capital, LBO, private placement, futures/options and GIC investing.

The firm also offers capital markets research, manager style analysis and securities lending analysis.

The firm has special expertise in foreign investment, currency hedging, real estate and venture capital.

Significant changes or developments at the firm in the past year include the opening of an office in Florham Park, N.J.

The firm has 32 tax-exempt clients on retainer and one long-term, non-retainer tax-exempt client. It provided services to seven other non-retainer tax-exempt clients during the past year.

There are 20 professional consultants. Fees are payable in hard or soft dollars.

Tax-exempt retainer clients include Georgia-Pacific, Chicago Police, Central Pension Fund (IUOE) and the MacArthur Foundation.

James E. Knupp, principal, is client contact.

Evaluation Associates Inc.

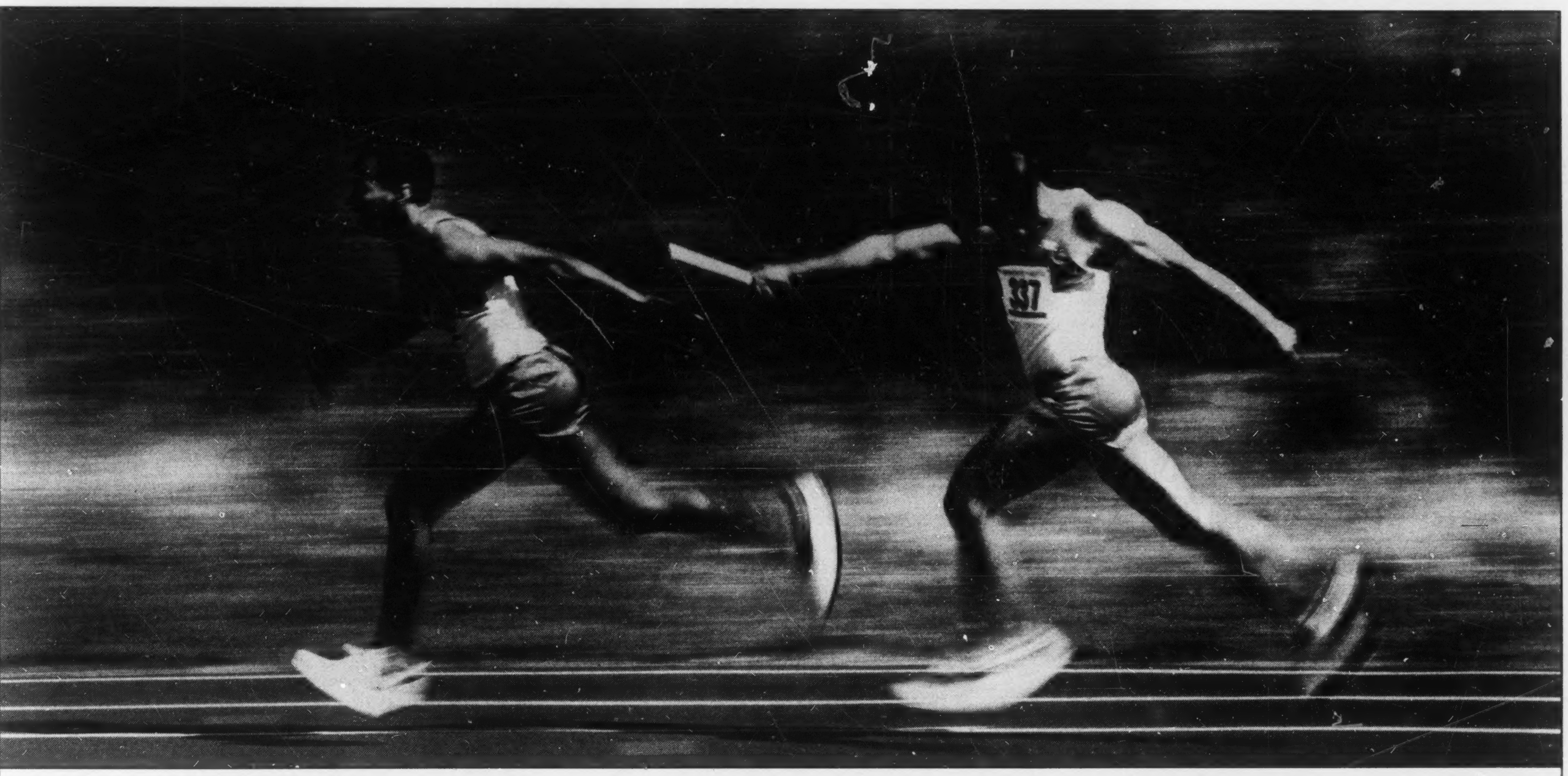
200 Connecticut Ave., Norwalk, Conn.
06854; (203) 855-2200

Evaluation Associates Inc., a subsidiary of MONY Financial Services, offers overall development of investment policies/objectives and of appropriate asset allocation.

The firm provides manager selection and performance measurement for U.S., global/international, real estate, venture capital, LBO, private placement, futures/options and GIC investing. Additional performance analysis is offered for U.S., global/international and real estate investing.

The firm also provides publications profiling more than 300 investment firms.

It has special expertise in evaluating and selecting managers.



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PIA

Significant changes or developments during the past year include the acquisition of Investment Management Controls, another Norwalk-based consulting firm.

Evaluation Associates has 75 tax-exempt retainer clients, of which 43 are corporate, 10 are public, three are union and 19 are foundations/endowments. In the past 12 months, the firm also provided services to 19 tax-exempt non-retainer clients, of which 11 were corporate, one public, two union and five foundations.

The firm employs nine professional consultants. Fees are payable in hard or soft dollars.

It offers 12 multiple-manager mutual funds to bank clients and customized multiple-manager funds to plan sponsors.

Tax-exempt retainer clients include Colgate Palmolive, Time Warner, City of Baltimore and Pennsylvania Public Schools.

Robert B. Mayerick, vice president, is client contact.

F

Gifford Fong Associates

1600 Riviera Ave., Suite 285, Walnut Creek, Calif. 94596; (415) 932-1910

Gifford Fong Associates, a subsidiary of Prudential Insurance Co., provides overall development of investment policies/objectives and of asset allocation. Performance measurement and analysis is offered for U.S., international/global, private placement and GIC investing. Performance analysis also is offered for futures/options investing.

The firm also offers time-weighted rate of return for performance measurement, providing components of return and bogey performance comparison; index tracking with value enhancement; and portfolio immunization and cash-flow matching.

The firm provides term structure analysis; bond valuation; dynamic asset allocation, without forecasting; return simulation; equity performance; risk analysis; and indexing and return attribution to the investment management industry.

The firm has special expertise in development of state-of-the-art market analysis and application to practical portfolio management.

Significant changes or developments at the firm in the past year include the conversion of some computer systems to the OS/2 operating environment and the development of interactive systems.

There are 12 professional consultants. Fees are payable in hard or soft dollars.

Theresa Conroy, manager, is client contact.

Fund Evaluation Group Inc.

414 Walnut St., Suite 812, Cincinnati, Ohio 45202; (513) 977-4400

Fund Evaluation Group Inc. provides overall development of investment policies/objectives and of asset allocation. Manager selection and performance measurement is offered for U.S. and international/global investing. Additional performance analysis is offered for U.S. investing.

The firm has special expertise in performance evaluation and manager selection for insurance companies.

Of the 64 tax-exempt clients on retainer, 32 are corporate, one is public, five are union and 26 are foundation or endowment funds.

There are four professional consultants. Fees are payable in hard or soft dollars.

Tax-exempt retainer clients include Indiana University Foundation, Wolverine World Wide, Michigan Legislative Retirement System and Michigan State University Foundation.

H. Bradley Eden, president, is client contact.

G

Robert Gentry & Associates

7473 E. Butler Drive, Building B, Scottsdale, Ariz. 85258; (602) 998-8046

Robert Gentry & Associates Ltd. provides overall development of investment policies/objectives and of asset allocation. Manager selection is offered for U.S., international/global, real estate, venture capital, futures/options and GIC investing. Performance measurement and analysis also is offered for those areas as well as private placements. Performance analysis is offered for LBO investments.

The firm also offers optimal risk/return relationships effecting asset allocation, and analysis of professional management capability and source of investment returns.

The firm provides mutual fund dynamics to the investment management industry.

The firm has special expertise in performance measurement; risk/return optimization for asset balance; manager selection; determination of investment objectives; and analysis of peer group performance.

Significant changes or developments at the firm in the past year include the development of an optimal risk/return program; analysis of manager dynamics for selection function; and more definitive peer group analysis.

Of the 108 tax-exempt clients on retainer, 101 are corporate, two are public, one is union and four are foundations/endowments. There are two corporate long-term, non-retainer tax-exempt clients. The firm also provided services to three other non-retainer tax-exempt clients during the past year, of which two were corporate and one was a foundation or endowment.

There are 16 professional consultants. Fees are payable in hard or soft dollars.

Tax-exempt retainer clients include Delaware Employees', ICI Americas, Nissan Motors and McKee Baking.

Steven Jeffries, vice president, is client contact.

H

Hamilton & Co. Inc.

101 Carnegie Center, Princeton, N.J. 08540; (609) 452-0300

Hamilton & Co. Inc. provides overall development of investment policies/objectives and of asset allocation. Manager selection and performance measurement and analysis is offered for U.S., international/global, real estate, venture capital, private placements, futures/options and GIC investing.

The firm also offers "Sharpshooter," a monitoring and reconciliation service that checks all activities in the custodial and investment management area.

The firm has special expertise in value-added investment consulting.

Significant changes or developments at the firm in the past year include the addition of two consultants to the firm.

Of the 51 tax-exempt clients on retainer, 25 are corporate, two are public, six are union and 18 are foundation or endowment funds.

There are 11 professional consultants. Fees are payable in hard or soft dollars.

Tax-exempt retainer clients include the American Automobile Association,

You don't have to be a mountain climber to appreciate that kind of advice. It applies to the bond business as well.

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Susan C. Lohuis and Neil T. Johnson, managing directors, are client contacts.

Hammond & Hammond Investment Advisory Research Services

P.O. Box 3567, Bellevue, Wash.
98009; (206) 451-2600

Hammond & Hammond Investment Advisory Research Services, a partnership within Dean Witter Reynolds, provides overall development of investment objectives/policies and of appropriate asset allocation. Manager selection and performance measurement and analysis are offered for U.S. investing.

The firm offers special expertise in serving the smaller ($100,000 to $500,000) plans, and in managers located in the Northwest.

It has 40 corporate tax-exempt clients on retainer.

There are four professional consultants. Fees are payable in soft dollars.

Craig Hammond is client contact.

Harrell, Cooper & Associates

12377 Merit Drive, Suite 1120, Dallas,
Texas 75251; (214) 934-7811

Harrell, Cooper & Associates Inc. provides overall development of investment policies/objectives and of appropriate asset allocation. Manager selection and performance measurement and analysis are offered for U.S., international/global, real estate and GIC investing.

The firm also offers a system of risk analysis combined with a statistical smoothing technique that provides a method of determining the investment management organizations that truly add value.

The firm has special expertise in the design, implementation and monitoring of investment policies.

Of the eight tax-exempt clients on retainer, four are corporate, two are public and two are foundation or endowment funds. In the past 12 months, the firm provided services to two non-retainer tax-exempt clients, one of which was corporate and the other a foundation or endowment fund.

There are two professional consultants. Fees are payable in hard dollars.

Tax-exempt retainer clients include Associated Milk Producers, City of Boulder, Mid-America Dairymen and Trinity University.

Robert L. Harrell, chairman, is client contact.

B. Hauptman & Associates

58 E. Burlington, Fairfield, Iowa
52556; (515) 472-8581

B. Hauptman & Associates Inc. provides overall development of investment policies/objectives and of appropriate asset allocation. Manager selection and performance measurement are offered for U.S., international/global, LBO and futures/options investing.

The firm has special expertise in non-traditional, market neutral investment strategies and hedge funds.

There are 25 tax-exempt clients on retainer and 50 other clients to which services were provided during the past year.

There are two professional consultants.

Fees are payable in hard or soft dollars.

The firm provides the following investment vehicles:

The Jupiter Capital Fund L.P., a multimanager limited partnership; and the GAIN program, which is composed of segregated accounts (minimum $50,000) managed by investment advisers.

William H. Hurlin, vice president, is client contact.

Hewitt Associates

100 Half Day Road, Lincolnshire, Ill.
60015; (708) 295-5000

Hewitt Associates provides overall development of investment policies/objectives and of appropriate asset allocation. Manager selection and performance measurement and analysis are offered for U.S., international/global, real estate, venture capital, futures/options and GIC investing.

The firm has special expertise in asset-liability projections.

Of the 55 tax-exempt clients on retainer, 50 are corporate, one is public, one is union and three are foundation or endowment funds. The firm has 40 long-term, non-retainer tax-exempt clients, of which 35 are corporate and five are foundation or endowment funds. The firm also provided services to 70 other non-retainer tax-exempt clients during the past year, of which 65 were corporate and five were foundation or endowment funds.

There are 15 professional consultants. Fees are payable in hard or soft dollars.

The firm co-sponsors the AHA Investment Program, a series of mutual fund portfolios designed for the investment of retirement and corporate assets of American Hospital Association member hospitals.

Tax-exempt retainer clients include AMP, Adolph Coors, Southland and Upjohn.

Ronald Jones, partner, is client contact.

Higgins Associates

University Place, 124 Mount Auburn
St., Cambridge, Mass. 02138;
(617) 864-8200

Higgins Associates provides overall development of investment policies/objectives and of appropriate asset allocation. Manager selection is offered for U.S., international/global and GIC investing. Performance measurement and analysis is offered for U.S. and international/global investing.

The firm also offers management of managers, based on asset allocation, selection and monitoring, individual portfolios and mutual funds. Performance attribution is also provided.

The firm has special expertise in overall plan investment strategy.

Significant changes or developments at the firm in the past year include the addition of two professionals.

Of the 17 tax-exempt clients on retainer, 14 are corporate and three are public. There are 25 long-term, non-retainer tax-exempt clients.

There are four professional consultants. Fees are payable in hard or soft dollars.

The firm provides the following investment vehicles: managed mutual fund packages and graduated risk options for 401(k)s; and risk-adjusted pension portfolios of mutual funds.

Tax-exempt retainer clients include Addison-Wesley Publishing, Connecticut Conference of Municipalities, Tufts Medical and Western Union.

Edwin M. Higgins, president, is client contact.

Hopewell Rembert Advisors

7647 Leesburg Pike, Falls Church,
Va. 22043; (703) 821-6655

Hopewell Rembert Advisors Inc. provides overall investment policies/objectives and of appropriate asset allocation. Manager selection and performance measurement and analysis is offered for U.S. investments.

The firm provides the same services to the investment management industry.

Of the 25 tax-exempt clients on retainer, 24 are corporate and one is a foundation or endowment fund. The firm also provided services to 25 non-retainer tax-exempt clients during the past year.

There are four professional consultants. Fees are payable in hard dollars.

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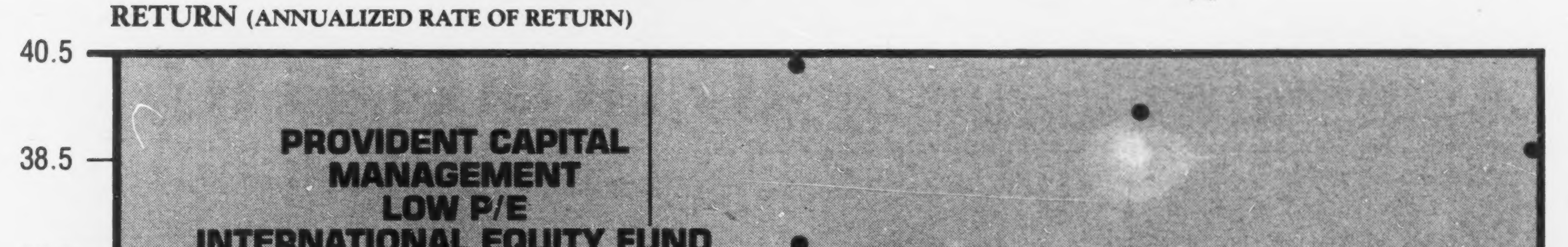

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Provident Capital Management, Inc.
The Proof is in the Performance.
1700 Market Street—Suite 2720, Philadelphia, PA 19103-3899

CONTACT: John Campbell, Director of Marketing, (215) 561-6009

Tax-exempt retainer clients include Hoven Corp., Douglas Fraser and McGill Charitable.

H. Lynn Hopewell is client contact.

K.H. Hueler Inc.

7460 Market Place Drive,
Minneapolis, Minn. 55344; (612) 941-5351

K.H. Hueler Inc. provides development of GIC investment policies and objectives, as well as GIC manager selection and performance measurement.

The firm offers special expertise in GICs, including placement, portfolio design, development of credit parameters and investment guidelines, comparative performance analysis of GIC pooled funds and manager evaluation.

Significant changes or developments at the firm in the past year include the development of a comprehensive GIC performance measurement product.

There are 12 corporate tax-exempt clients on retainer. There are six long-term, non-retainer corporate tax-exempt clients.

There are five professional consultants. Fees are payable in hard or soft dollars.

Tax-exempt clients include Dayton Hudson, Super Valu & Shopko Stores, Manitowoc Co. and Sargent & Lundy.

Kelli Hustad Hueler, president, is client contact.

I

Ibbotson Associates Inc.

8 S. Michigan Ave., Suite 700,
Chicago, Ill. 60603; (312) 263-3434

Ibbotson Associates Inc. provides overall development of investment policies and objectives and of appropriate asset allocation. Performance analysis is offered for U.S., international/global, real estate, venture capital, LBO, futures/options and GIC investing.

The firm also offers performance attribution services, asset allocation, asset class development and specialized research consulting services.

The firm has special expertise in evaluating investment questions.

Significant changes or developments at the firm in the past year include the division of the firm into a research/consulting division and a software/data products division.

There are five professional consultants. Fees are payable in hard or soft dollars.

Marvin B. Waring, managing director-consulting and research, is client contact.

INDATA

5 High Ridge Park, Stamford, Conn.
06905; (203) 329-6100

INDATA, a service of Gordon, Haskett & Co., provides performance measurement for U.S., international/global, private placements and futures/options investing. Additional performance analysis is offered for U.S. and international/global investing.

The firm provides Investment Management System, a comprehensive portfolio management, performance measurement and security analysis system, to the investment management industry.

The firm has special expertise in weekly comparative performance measurement, attribution analysis and evaluation of more than 2,500 portfolios.

Significant changes or developments at the firm in the past year include a joint venture with a European firm for development of an international portfolio data base and the development of a high-quality color graphics package for sponsor presentations.

Of the 68 tax-exempt clients on retainer, 30 are corporate, 15 are public, one is union and 22 are foundation or endowment funds.

There is one professional consultant. Fees are payable in hard or soft dollars.

Steven N. Johnson, director of marketing, is client contact.

Institutional Fund Consultants Inc.

2423 American Lane, Madison, Wis.
53704; (608) 244-3541

Institutional Fund Consultants Inc. provides overall development of investment policies/objectives and of appropriate asset allocation. Manager selection and performance measurement and analysis are offered for U.S., international/global, real estate, futures/options and GIC investing.

The firm also offers master trustee/custodian selection and analysis, special studies and mutual fund selection.

The firm has special expertise in investment manager analysis, investment policy development and asset allocation.

Of the eight tax-exempt clients on retainer, seven are corporate and one is union. There are eight long-term, non-retainer tax-exempt clients, of which six are corporate and two are foundation or endowment funds. The firm also provided services to 11 other non-retainer tax-exempt clients during the past year, of which eight were corporate and three were foundation or endowment funds.

There are two professional consultants. Fees are payable in hard or soft dollars.

Tax-exempt retainer clients include Fred S. James & Co., Paper Converting Machine, Painters, District Council 6 and Reid Memorial Hospital.

Gordon L. King, president, and Kathleen A. Crowley, executive vice president, are client contacts.

PIPER international rankings will be published Dec. 11.

Institutional Property Consultants Inc.

4330 LaJolla Village Drive, Suite 310,
San Diego, Calif. 92122
7 Piedmont Center, Suite 715, Atlanta,
Ga. 30305; (404) 261-8049

Institutional Property Consultants Inc. provides overall development of real estate investment policies/objectives and of appropriate real estate asset allocation. Real estate manager selection and performance measurement and analysis are available.

The firm also offers establishment of transaction review and asset management processes; due diligence on prospective property investments; definition of environmental hazard policy; and design of manager fee schedules.

The firm has special expertise in real estate consulting.

Significant changes or developments at the firm in the past year include the addition of two consultants.

Of the 31 tax-exempt clients on retainer, seven are corporate, 19 are public, two are union and three are foundation or endowment funds. The firm has seven long-term, non-retainer tax-exempt clients, of which four are corporate, two are public and one is a foundation or endowment fund. The firm also provided services to six other non-retainer tax-exempt clients during the past year, of which four were corporate and two were public.

There are seven professional consultants. Fees are payable in hard dollars.

Paul H. Saylor and Barbara R. Cambon, principals, are client contacts.

International Investment Group Inc.

17 Madison Ave., Port Chester, N.Y.
10573; (914) 939-1543

International Investment Group, formerly the Option Consulting Group, provides overall development of investment policies/objectives and asset

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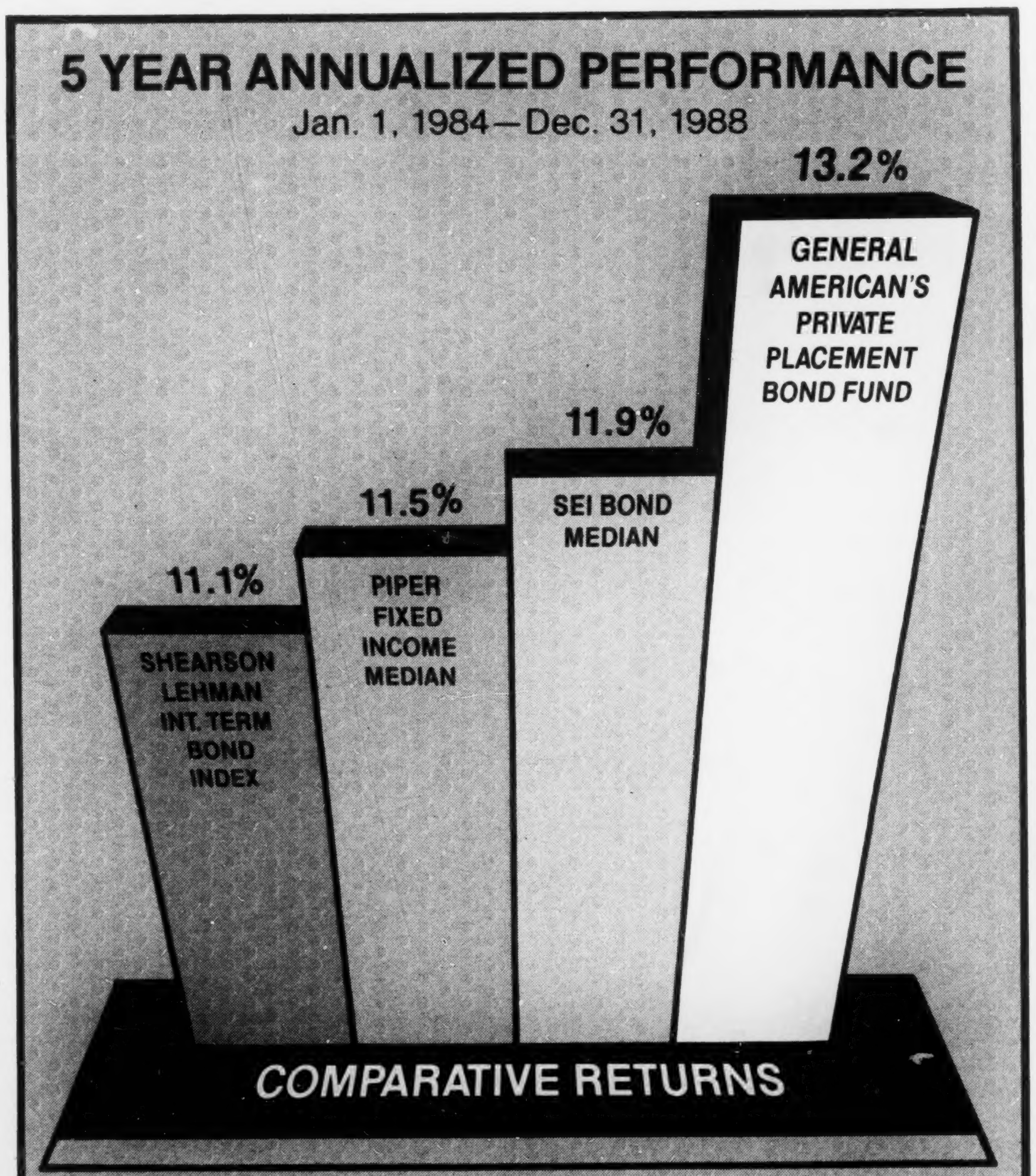

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allocation. U.S. and international/global performance measurement and analysis are offered.

The firm also offers stock index optimization, global asset optimization, multicurrency optimization and option hedging strategies. Other computerized consulting systems include in-house quote customization, trading strategy computerization, investment strategy simulation research and an accounting/portfolio monitoring platform.

The firm has special expertise in equity optimization.

Significant changes or developments at the firm in the past year include the addition of five professionals and the firm's shift in its emphasis toward equity optimization from options hedging.

There are five corporate tax-exempt clients on retainer.

There are 10 professional consultants. Fees are payable in hard or soft dollars.

Tax-exempt retainer clients include Balch, Hardy & Scheinman and the International Option Investment Trust.

Kurt Hiebaum, president, is client contact.

InterSec Research Corp.

48 Signal Road, Stamford, Conn.
06902; (203) 348-7101

InterSec Research Corp. provides overall development of international and global investment policies and objectives, as well as asset allocation. It offers manager selection and performance measurement and analysis for international/global investing.

The firm also offers performance attribution analysis and regional investment performance measurement.

The firm provides international investment manager consulting; sponsor consulting; international performance measurement; global pension industry studies; and multi-currency portfolio accounting systems to the investment management industry.

The firm has special expertise in international and global investment consulting.

Significant changes or developments at the firm in the past year include the expansion of performance measurement universes in Australian dollars, Canadian dollars and Japanese yen-based accounts.

Of the 15 tax-exempt clients on retainer, 10 are corporate, two are public and three are foundations/endowments. There are 14 long-term, non-retainer tax-exempt clients, of which 12 are corporate, one is public and one is a foundation or endowment fund. The firm also provided services to seven other non-retainer tax-exempt clients during the past year, of which four were corporate, two were public and one was a foundation or endowment fund.

There are 11 professional consultants. Fees are payable in hard or soft dollars.

Other financial services provided are strategic business planning for investment managers that are broadening their product or business scope into the international/global arena.

Tax-exempt retainer clients include Arizona Public Service, H.J. Heinz and the Superannuation Fund Investment Trust (Australia).

Duncan Fordyce, senior vice president and director, is client contact.

Investment Management Inc.

2700 E. 51st St., Suite 340, Tulsa,
Okla. 74105; (918) 742-3031

Investment Management Inc., a subsidiary of Rubottom, Dudash and Associates Inc., provides overall development of investment policies/objectives and asset allocation. U.S. manager selection and performance measurement is offered.

The firm has special expertise in asset allocation and fixed-income strategy.

It has 12 corporate tax-exempt clients on retainer.

There are two professional consultants. Fees are payable in hard dollars.

Other financial services provided are investment research, asset/liability management and corporate evaluations.

Donald J. Rubottom, president, is client contact.

Investment Management Evaluation Service

Nashville City Center, P.O. Box 2727,
Nashville, Tenn. 37219; (615)
780-9360

Investment Management Evaluation Service, a division of Equitable Securities Corp., provides overall development of investment policies/objectives and asset allocation. Manager selection and performance measurement are offered for U.S., international/global, venture capital, private placements, futures/options and GIC investments. Additional performance analysis is available for all services listed above except GICs.

The firm also offers analysis of risk-adjusted returns and continuing analysis of hypothetical asset allocation scenarios on a risk-adjusted basis.

The firm has special expertise in asset allocation and strategic planning.

Significant changes or developments at the firm in the past year include the addition of two staff members.

Of the 14 tax-exempt clients on retainer, 10 are corporate, two are public and two are foundation or endowment funds. There are 12 long-term, non-retainer tax-exempt clients, 10 of which are corporate and two are foundation or endowment funds.

There are two professional consultants. Fees are payable in hard or soft dollars.

The firm provides the following investment vehicle: the First Quadrant Investors L.P.

Tax-exempt retainer clients include the Tennessee Bone and Joint Clinic, the Webb School Endowment, Metro Nashville Employees and the Longleat Fund.

Ward Cammack, managing director, is client contact.

The Investment Measurement Co.

220 Montgomery St., Suite 425, San
Francisco, Calif. 94104; (415)
254-2102

The Investment Measurement Co. provides overall development of investment policies and objectives and of asset allocation. Manager selection is offered for U.S., real estate, futures/options and GIC investments. The firm offers performance measurement and analysis for the above categories as well as global/international investing.

The firm also offers a manager optimization program.

Performance measurement services are offered to the investment management industry.

The firm has special expertise in consulting for Taft Hartley and public funds, particularly in manager searches and asset allocation.

Significant changes or developments at the firm in the past year include the firm's merger with Dyson & Associates.

Of the 16 clients on retainer, three are corporate, four are public, eight are union and one is a foundation or endowment fund. The firm also provided services to five non-retainer clients during the past year, of which two were public, two were union and one was a foundation or endowment fund.

There are five professional consultants. Fees are payable in hard and soft dollars.

Dwight O. McCan and Lyman Dyson, principals, are client contacts.

Social investing will be highlighted in the Nov. 27 issue of *Pensions & Investment Age*.

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Ronald A. Karp Associates

47 Maple St., Summit, N.J. 07901;
(201) 522-1414

Ronald A. Karp Associates Inc. provides overall development of investment policies and objectives, and of appropriate asset allocation. Manager selection is offered for U.S., international/global, real estate and GIC investments.

Performance measurement is offered for U.S. and real estate investments; performance analysis is offered for real estate and GICs.

The firm has special expertise in real estate, asset allocation, international investments and GIC negotiations.

Significant changes or developments at the firm in the past year include enhancements of its performance measurement system.

There are 12 retainer tax-exempt clients and 10 long-term, non-retainer tax-exempt clients.

There are three professional consultants.

Fees are payable in hard or soft dollars.

Tax-exempt clients include the Pennsylvania State Employes, Los Angeles Fire and Police, Saatchi & Saatchi and the Ohio School Employees.

Sheri L. Kole, vice president, is client contact.

W.T. Kennedy Inc.

300 W. Peachtree St., Suite 10G,
Atlanta, Ga. 30308; (404) 523-8500

W.T. Kennedy Inc. provides overall development of investment policies and objectives and of asset allocation. Manager selection and performance measurement and analysis are offered for U.S. consulting services.

The firm also offers presentation services to the board of trustees or investment committee and staff educational training.

Of the 21 tax-exempt clients on retainer, 12 are corporate, five are public, one is union and three are foundation or endowment funds. The firm also provided services to 25 non-retainer tax-exempt clients during the past year, of which 16 were corporate, five were public, one was union and three were foundation or endowment clients.

There is one professional consultant. Fees are payable in hard or soft dollars.

William T. Kennedy is client contact.

Kidder Peabody Prime Consulting Group

20 Exchange Place, New York, N.Y.
10005; (212) 510-5089

Kidder Peabody Prime Consulting Group, a subsidiary of GE Financial Services, provides overall development of policies and objectives and of asset allocation. Manager selection and performance measurement are available for U.S. investments.

The firm has special expertise in asset allocation studies for midsize funds ($2 million to $50 million).

Significant changes or developments at the firm in the past year include the introduction of a small account service (NOVA), which offers consulting services to the $200,000 to $2 million range of funds for a wrap fee.

Of the 390 tax-exempt clients on retainer, 340 are corporate, 30 are public, 10 are union and 10 are foundation or endowment funds.

There are three professional consultants. Fees are payable in both hard and soft dollars.

Tax-exempt clients include L.L. Bean and Southwire.

Natalka Bukalo and Earle Dodd, vice presidents, and Ellen Phillips are client contacts.

KPMG Peat Marwick

345 Park Ave., New York, N.Y.
10154; (212) 872-5973

KPMG Peat Marwick provides overall development of investment policies and objectives and of asset allocation. Manager selection is offered for U.S., international/global, real estate, venture capital, LBO, futures/options and GIC investments. Performance analysis is offered for all of the above services, and for private placements. Performance measurement is offered for U.S. investments only.

The firm also offers master custodian selection, research projects and surveys.

The firm provides investment performance attestation to the investment management industry.

The firm has special expertise in multidisciplinary (pension and insurance actuarial, tax and treasury) and international consulting.

Significant changes or developments at the firm in the past year include enhancements to its international consulting services.

There are 12 professional consultants. Fees are payable in hard and soft dollars.

It offers audit and tax services, in addition to its consulting services.

Evelyn Morgner, senior manager, is client contact.

Pensions & Investment Age welcomes letters.

Letters should include name, address and the company of the writer.

Editors reserve the right to edit any letter.

L

Laventhol & Horwath

1845 Walnut St., Philadelphia, Pa.
19103; (215) 299-1700

Laventhol & Horwath provides overall development of real estate investment policies, objectives and asset allocation. Manager selection and performance measurement and analysis is offered for real estate investments.

The firm also offers real estate due diligence, portfolio analysis, appraisal and construction consulting.

The firm provides real estate due diligence services, appraisals and construction consulting to the investment management industry.

The firm has special expertise in real estate consulting.

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Of the three tax-exempt clients on retainer, one is corporate and two are public. The firm has 11 long-term, non-retainer tax-exempt clients, of which three are corporate, five are public, two are union and one is a foundation or endowment fund.

Fees are payable in hard dollars.

Other financial services offered include accounting, auditing and tax services.

Tax-exempt clients include Allied-Signal, Minnesota State Board of Investment and Maryland State Retirement.

J. Richard Rosenberg, director-real estate pension advisory services, is client contact.

Legg Mason Wood Walker

111 S. Calvert St., Baltimore, Md.
21202; (301) 539-4692

Legg Mason Wood Walker Inc. — Investment Consulting Group, a subsidiary of Legg Mason Inc., provides overall development of investment policies and objectives and of appropriate asset allocation. It also provides U.S. manager selection and performance measurement.

Significant changes or developments at the firm in the past year include the development of the consulting unit in January.

There is one professional consultant. Fees are payable in hard or soft dollars.

Brokerage services are offered through an affiliate.

William G. McVay, director of investment management consulting, is client contact.

Lehrer Development and Investments

5555 Del Monte Drive, Suite 802,
Houston, Texas 77056-4105; (713)
552-1442 or (800) 858-1400

Lehrer Development and Investments provides overall development of investment policies and objectives and of asset allocation. Manager selection is offered for real estate investments; performance measurement is offered for international/global, real estate and private placements; performance analysis is offered for real estate.

The firm also offers a wide variety of real estate feasibility, due diligence, asset performance, market analysis and other real estate-related studies, reports and loan requests.

The firm provides real estate performance and feasibility studies to the investment management industry.

The firm has special expertise in real estate.

There are two tax-exempt clients on retainer; there are 10 long-term, non-retainer tax-exempt clients; and the firm also provided services to 10 non-retainer tax-exempt clients during the past year.

There are three professional consultants. Fees are payable in hard dollars.

Tax-exempt clients include Federal Home Loan Bank of Dallas and the University of Houston.

Kenneth Eugene Lehrer, managing director, is client contact.

Lewis, Bailey Associates

1 Financial Center, Boston, Mass.
02111; (617) 439-3232

Lewis, Bailey Associates Inc. provides overall development of investment policies and objectives and of asset allocation. Manager selection and performance measurement is offered for U.S., international/global, real estate, venture capital, LBO, private placements, futures/options and GIC investing. Performance analysis is offered for all services listed above except GICs.

The firm also offers to its clients extensive investment and financial planning research reports.

The firm has special expertise in financial and investment planning for large family groups, corporate pension plans and public authorities. Extensive coverage is offered of non-traditional asset classes, such as real estate, venture capital and global investments.

There are 264 tax-exempt clients on retainer.

There are 23 professional consultants. Fees are payable in hard and soft dollars.

Tax-exempt clients include Blue Cross/Blue Shield of Florida, Hewlett-Packard, 3M and the World Bank.

David B. Thurston is client contact.

Loewi Managed Account Services Inc.

111 E. Kilbourn Ave., Milwaukee, Wis.
53202; (414) 347-3360

Loewi Managed Account Services Inc., a subsidiary of Loewi Financial Cos. Ltd., provides overall development of investment policies and objectives and of asset allocation. Manager selection and performance measurement and analysis is offered for U.S. and international/global investing.

The firm has special expertise in risk evaluation.

There are five corporate tax-exempt clients on retainer. The firm has 65 long-term, non-retainer tax-exempt clients, of which 25 are corporate, 35 public and five are foundation or endowment funds. The firm also provided services to 100 other non-retainer tax-exempt clients during the past year, of which 40 were corporate, 50 were public, two were union and eight were foundation or endowments.

There are three professional consultants. Fees are payable in hard and soft dollars.

Other financial services are offered through the firm's affiliate, Blunt Ellis & Loewi Inc., a full service regional brokerage and investment banking firm.

Thomas M. Trebby, vice president, is client contact.

Lowry Consulting Group Inc.

2859 Paces Ferry Road, Suite 1900,
Atlanta, Ga. 30339; (404) 431-1100

Lowry Consulting Group Inc., a subsidiary of Lowry Associates Inc., provides overall development of investment policies and objectives and of asset allocation. Manager selection is provided for U.S., international/global, real estate, venture capital, futures/options and GIC investments. Performance measurement is offered for all of the above categories, as well as LBO and private placement investments. Performance analysis is offered for U.S., international/global, real estate, private placements and futures/options investments.

The firm also offers asset/liability integration; FAS 87 modeling; trustee evaluation; a Canadian data base; retiree medical issue consulting; and the implementation of a management process for long-term cost control.

The firm has special expertise in analytical capabilities and communication skills on pension-related issues. The firm also focuses on the application of computer technology in analysis.

Significant changes or developments at the firm in the past year include the enhancement of analytic capabilities and computer graphics communications technology.

Of the 70 tax-exempt clients on retainer, 60 are corporate, one is union and nine are foundation or endowment funds.

There are 11 professional consultants. Fees are payable in hard dollars.

Tax-exempt clients include Black & Decker, Duke Power, Emerson Electric and CSX.

Michael T. Wilkinson, president and chief executive officer, and Victor A. Bell Jr., managing director-client services, are client contacts.

Profiles of the top pension funds will be published in the Jan. 22 edition of *Pensions & Investment Age.*

$ $ $ $ $

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M

May Financial Corp.

3302 Southland Center, 400 N. Olive,
Dallas, Texas 75201; (214)
922-0070

May Financial Corp. provides overall development of investment policies and objectives and of appropriate asset allocation.

Manager selection and performance measurement and analysis is offered for U.S. and international/global investing.

The firm also offers services in asset allocation, performance vs. stated goals and objectives, buy and sell discipline and risk analysis.

The firm has special expertise in asset allocation and money manager selection, evaluation and reporting.

Significant changes or developments at the firm in the past year include the establishment of the consulting division and a manager data base.

There are two professional consultants.

Fees are payable in hard and soft dollars.

Sarah H. Anderson, manager-account consulting, is client contact.

James Meketa Associates

1029 Beacon St., Newton Centre,
Mass. 02159; (617) 964-0375

James Meketa Associates Inc. provides overall development of investment policies and objectives and of appropriate asset allocation. Manager selection is offered for U.S., international/global, real estate, venture capital and GIC investing. Performance measurement is offered for all of the above services except venture capital. Performance analysis is offered for U.S., international/global and GIC investing.

The firm also offers extensive cost control procedures.

The firm has special expertise in asset allocation and cost control.

Of the 10 tax-exempt clients on retainer, four are corporate, three are union and three are foundation or endowment funds. The firm has four long-term, non-retainer tax-exempt clients, of which two are union and two are foundation or endowment funds. The firm also provided services to two other non-retainer tax-exempt clients during the past year — one union and one foundation/endowment client.

There are five professional consultants. Fees are payable in hard dollars.

Tax-exempt clients include Northwest Airlines, Ohio Laborers District Council and Contractors of Ohio, Brigham and Womens' Hospital and Massachusetts Laborers.

John A. Denney, vice president, is client contact.

Mellon Bank

1 Mellon Bank Center, Room
151-3315, Pittsburgh, Pa.
15258-0001; (412) 234-9605

Mellon Bank provides overall development of investment policies and objectives and appropriate asset allocation. Manager selection is offered for U.S. investing.

Performance measurement and analysis is offered for U.S. and international/global investing.

The firm also offers on-line data access, customized performance reports and transaction cost measurement.

Performance information and analytics are provided to the investment management industry.

Significant changes or developments at the firm in the past year include the enhancement of on-line capabilities, portfolio modeling tools and a defined contribution product.

Of the 75 tax-exempt clients on retainer, 63 are corporate, four are public, one is union and seven are foundation or endowment funds.

There are five professional consultants.

Fees are payable in hard and soft dollars.

William G. Bensur Jr. is client contact.

Wm. M. Mercer Meidinger Hansen Inc.

1417 Lake-Cook Road, Deerfield, Ill.
60015; (708) 948-7400

Wm. M. Mercer Meidinger Hansen Inc., a subsidiary of Marsh & McLennan Inc. provides overall development of investment policies and objectives and of appropriate asset allocation. Manager selection and performance measurement are offered for U.S., international/global, real estate, futures/options and GIC investing. Performance analysis is offered for U.S. and real estate investing.

Performance interpretation and transaction cost analysis also are offered.

The firm has special expertise in asset/liability modeling, performance interpretation and GIC placements.

Significant changes or developments at the firm in the past year include the release of new manager search and performance measurement systems.

Of the 388 tax-exempt clients on retainer, 188 are corporate, 124 are public, 51 are union and 25 are foundation or endowment funds. The firm has 90 long-term, non-retainer tax-exempt clients, of which 43 are corporate, 21 public, 14 union and 12 are foundation or endowment funds. The firm also provided services to 102 other non-retainer tax-exempt clients during the past year, of which 41 were corporate, 30 were public, 19 were union and 12 were foundation or endowment clients.

There are 94 professional consultants. Fees are payable in hard and soft dollars.

Tax-exempt clients include Johnson & Johnson, Arizona State Retirement, Orange County Employees' Retirement and Alaska Teamster Employer Welfare Trust.

Terry Dennison may be contacted for further information.

Merrill Lynch Consulting Services

717 Fifth Ave., New York, N.Y. 10022;
(212) 415-7956

Merrill Lynch Consulting Services, a subsidiary of Merrill Lynch, Pierce, Fenner & Smith Inc., provides overall development of investment policies and objectives and of appropriate asset allocation. Manager selection is offered for U.S. and international/global investing. Performance measurement and analysis is available for U.S., international/global, real estate and venture capital investments.

Merrill Lynch has special expertise in performance measurement, policy development, asset allocation and manager identification.

Significant changes or developments at the firm in the past year include the addition of a proxy voting module to its portfolio performance

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measurement service.

The firm has 550 long-term, non-retainer tax-exempt clients, of which 200 are corporate, 100 public, 100 union, 100 foundation or endowment funds and 50 in other categories.

There are 25 full-time professional consultants. Fees are payable in hard and soft dollars.

David T. Ferrier, vice president, is client contact.

Monitoring and Evaluation Services Inc.

3375 Park Ave., Suite 3006,
Wantagh, N.Y. 11793; (516)
781-2000

Monitoring and Evaluation Services Inc. provides overall development of investment policies and objectives and of asset allocation. Manager selection and performance measurement are offered for U.S., international/global, real estate and GIC investments. Quarterly reports, color graphics and the monitoring of transactions to analyze conformity to asset allocation also are provided.

The firm provides research relating to market trends and events influencing capital markets to the investment management industry.

The firm has special expertise in monitoring transactions on a current basis as to commission amount and execution price as it relates to daily trading ranges.

Significant changes or developments at the firm in the past year include the implementation of a commission recapture program for clients for equity and fixed-income transactions.

Of the 10 tax-exempt clients on retainer three are public and seven are union funds. The firm has five long-term, non-retainer tax-exempt clients, of which one is public and four are union.

There are two professional consultants.

Fees are payable in hard and soft dollars.

Other financial services provided include broker services and clearance and execution of equity and fixed-income transactions.

Tax-exempt clients include Communications Workers of America, New York City Detectives, Service Employees of Upstate New York and the New York City Police, Superior Officers Council.

John T. Renck, president, is client contact.

Morgan Keegan & Co. Inc.

50 Front St. N., Memphis, Tenn.
38103; (901) 524-4100

Morgan Keegan & Co. Inc., a subsidiary of Morgan Keegan Inc., provides overall development of investment policies and objectives and of asset allocation. Manager selection and performance measurement are offered for U.S., international/global, futures/options and GIC investing. Performance analysis is offered for U.S. investments.

The firm also offers pension plan design, installation and administration.

It provides equity and fixed-income research to the investment management industry.

The firm has special expertise in performance measurement and manager search and selection.

Significant changes or developments at the firm in the past year include the introduction of two wrap fee products called the Preferred Managers and Preferred Services programs.

Of the 10 tax-exempt clients on retainer, seven are corporate, one is union and two are foundation or endowment funds. The firm has 163 long-term, non-retainer tax-exempt clients, of which 118 are corporate, five public, 18 union and 22 are foundation or endowment funds. The firm also provided services to 187 other non-retainer tax-exempt clients during the past year, of which 135 were corporate, seven were public, 20 were union and 25 were foundation or endowment clients.

There are six professional consultants. Fees are payable in hard and soft dollars.

The firm offers its own investment vehicle, the Southern Capital Funds.

Other financial services provided include brokerage services, investment banking, and equity and fixed-income research.

J. Blake Taylor, vice president, is client contact.

N

New England Pension Consultants

253 Summer St., Boston, Mass.
02210; (617) 737-1960

New England Pension Consultants provides overall development of investment objectives and policies and of asset allocation. Manager selection and performance measurement are offered for U.S., international/global, real estate, venture capital, LBO, private placements, futures/options and GIC investments. Performance analysis is offered for all of the above services except LBOs.

The firm also assesses the impact of currency and country selection in international investing; stock and sector selection; policy vs. managers; current, prospective and historic risk analyses; and strategic vs. tactical asset allocation.

The firm has special expertise in custodial searches; structured portfolios; FAS 87; derivative instruments and hedging strategies; and South Africa-free investment selection and analysis.

Significant changes or developments at the firm in the past year include the addition of a custodian search capability; enhanced manager search data base; enhanced performance measurement diagnostics; and expanded asset class measurement.

There are 50 tax-exempt clients on retainer.

There are three professional consultants. Fees are payable in hard and soft dollars.

Richard M. Charlton, president, is client contact.

Non Traditional Investments

579 Central Ave., Highland Park, Ill.
60035; (708) 926-1831

Non Traditional Investments, a division of Mesirow Capital Markets, a subsidiary of Mesirow Financial, provides merger arbitrage consulting, assisting in manager evaluation and selection; performance measurement and analysis of managers that invest privately in the stock of companies undergoing a merger, acquisition or buy-out.

It offers a limited traditional manager consulting practice.

The firm provides its Arbitrage Composite Index results to all managers in its data base.

The firm has special expertise in merger arbitrage.

The firm has 12 long-term, non-retainer tax-exempt clients, of which nine are corporate and three, public. The firm also provided services to 20 other

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non-retainer tax-exempt clients during the past year, of which 10 were corporate, five were public, three were union and two were foundation or endowment clients.

There are three professional consultants. Fees are payable in hard and soft dollars.

Tax-exempt clients include the Rapid Transit District of Los Angeles, Santa Fe, Graco and BATUS.

Howard M. Rossman and Jai Luster, senior vice presidents, and Gene Cordon, investment consultant, are client contacts.

The Nottingham Co.

*P.O. Box 8315, Rocky Mount, N.C.
27804; (800) 525-3863*

The Nottingham Co. provides overall development of investment policies and objectives and of asset allocation. Manager selection and performance measurement is offered for U.S. investments.

The firm provides assistance to investment management firms in the establishment, administration and compliance of no-load mutual funds.

Significant changes or developments at the firm in the past year include the establishment of the Nottingham Investment Trust, the Jamestown Fund and the FBP Contrarian Fund.

The firm has 18 long-term, non-retainer tax-exempt clients.

There is one professional consultant. Fees are payable in hard or soft dollars.

Investment vehicles offered by the firm include the Nottingham Investment Trust, a manager of managers fund.

Frank P. Meadows III is client contact.

O

Orben Associates Inc.

*40 Wall St., New York, N.Y. 10005;
(212) 269-9191*

Orben Associates Inc. provides overall development of investment policies and objectives and of asset allocation. Performance measurement is offered for U.S., venture capital and private placement investing.

Fees are payable in hard dollars only.

Jack R. Orben, president, is client contact.

P

PaineWebber Inc.

*1200 Harbour Blvd., Weehawken,
N.J. 07087; (201) 902-3128*

PaineWebber Inc. provides overall development of investment policies and objectives and of asset allocation. Manager selection and performance measurement and analysis are offered for U.S. investments.

The firm has special expertise in asset allocation and performance measurement.

There are eight professional consultants. Fees are payable in soft dollars.

The firm also full brokerage services.

Jack Hanna, national sales manager, is client contact.

Peirce, Park Group

*2600 W. Seventh St., Suite A,
Wilmington, Del. 19805; (302)
429-0982*

Peirce, Park Group provides overall development of investment policies and objectives and of asset allocation. Manager selection is offered for U.S., international/global and real estate investments. Performance measurement is offered for all of the above services, as well as for GICs. Performance analysis is provided for U.S. investments.

The firm also offers asset liability simulation analysis and performance measurement services, from summary reviews to full-scale diagnostics, based on individual security holdings.

The firm has special expertise in econometric modeling.

There are two professional consultants. Fees are payable in hard and soft dollars.

Michael W. Shone, president, is client contact.

Pension Consulting Alliance

*1435 Gardena Ave., Glendale, Calif.
91204; (818) 240-0372*

Pension Consulting Alliance provides overall development of investment policies and objectives and of appropriate asset allocation. Manager selection and performance analysis are offered for U.S., global/international, real estate, venture capital, LBO, private placements, futures/options and GIC investments. The firm also offers direct investment analysis, valuations, custody and currency analysis.

The firm has special expertise in private placements, real estate and international consulting services.

There are four public tax-exempt clients on retainer. There is one public long-term, non-retainer tax-exempt client. The firm provided services to seven other non-retainer clients during the past year.

Fees are payable in hard dollars.

Tax-exempt clients include California State Teachers, the State of Connecticut, the State of Illinois and the State of Virginia.

Allan Emkin, managing director, is client contact.

Pension Portfolio Advisors

*25800 Northwestern Highway, P.O.
Box 2165, Southfield, Mich.
48037-2165; (313) 357-4125*

Pension Portfolio Advisors, a subsidiary of Maccabees Life Insurance Co., provides overall development of investment policies and objectives and of asset allocation. Manager selection and performance measurement and analysis are offered for U.S., international/global and GIC investing.

The firm has special expertise in the establishment and implementation of investment strategies, based upon client objectives.

Significant changes or developments at the firm in the past year include a doubling of its staff and consulting base.

Of the 20 tax-exempt clients on retainer, 15 are corporate, three are public and two are union. The firm has 306 long-term, non-retainer tax-exempt clients, of which 289 are corporate, 13 are public and four, union.

There are eight professional consultants. Fees are payable in hard and soft dollars.

The firm offers separate account investment vehicles, including SAFTY +, equity income, S&P 500, equity growth and international equity index investments.

Other financial services include third-party administration services and broker/dealer services, through Mac-

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a wholly-owned subsidiary of

Brinson Holdings, Inc.

has acquired from

First Chicago Corporation

specified assets and liabilities of

First Chicago Investment Advisors, N. A.

a global investment firm
with $12.5 billion of institutional assets under management.

*The undersigned assisted in the negotiations leading
to this transaction and arranged acquisition financing,
including investments in Brinson Holdings, Inc. by
Hellman & Friedman Capital Partners and
Hellman & Friedman Capital Partners International (BVI).*

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cabees Equity Sales Co.

Carole Beauchemin, manager-marketing services, is client contact.

Pension Realty Advisors

155 Sansome St., Suite 650, San Francisco, Calif. 94104; (415) 291-9000

Pension Realty Advisors, a subsidiary of Spear Street Advisors, provides overall development of investment policies and objectives and of asset allocation. The firm offers real estate manager selection and performance measurement and analysis.

The firm also offers portfolio management and strategy; property and fund due diligence; and real estate investment plan and objectives.

The firm provides the following to the investment management industry: special investment research; real estate performance measurement services; real estate industry advisory services; independent fiduciary services; and PRA Realty Fund Report.

The firm's special expertise is in its overall real estate industry perspectives, including property investment analysis, property market outlook, real estate management requirement and real estate capital market activity.

Of the four tax-exempt clients on retainer, two are corporate, one is public and one is union. The firm has two corporate long-term, non-retainer tax-exempt clients. The firm also provided services to 15 non-retainer tax-exempt clients during the past year, of which five were corporate, three were public, six were union and one was a foundation or endowment client.

There are five professional consultants. Fees are payable in hard dollars.

Tax-exempt clients include Carpenters of Western Washington, BellSouth, Texas Teachers and Control Data.

Paul S. Saint-Pierre, president, is client contact.

Performance Analytics Inc.

30 S. Wacker Drive, Suite 1502, Chicago Ill. 60606; (312) 930-9560

Performance Analytics Inc. provides overall development of investment policies and objectives and of appropriate asset allocation. Manager selection and performance measurement and analysis are offered for U.S., global/international, real estate, futures/options and GIC investments.

The firm also offers assistance to clients in equity style tilting, where dollars are redirected to undervalued styles of management from overvalued styles.

The firm provides analysis of performance of composite results to the investment management industry.

The firm has special expertise in asset allocation, style tilting and in the early detection of manager problem areas.

Significant changes or developments at the firm in the past year include greater emphasis on asset allocation and style tilting.

There are 250 long-term, non-retainers, tax-exempt clients.

There are seven professional consultants. Fees are payable in hard and soft dollars.

Tax-exempt clients include Zenith Electronics, Bell & Howell, Ralston Purina and Peoples Energy.

William G. Lowery, national sales manager, is the client contact.

G.A. Pogue & Associates

60 Patterson Ave., Greenwich, Conn. 06830; (203) 661-4080

G.A. Pogue & Associates provides global/international performance measurement and analysis.

It also provides software and data bases for global investment management. Analytical and computer services are offered for the passive and enhanced passive management of global equity and fixed-income portfolios. Analytical research is offered on a wide range of investment management issues.

The firm has special expertise in the application of modern finance theory and computer technology to global investment management.

Significant changes or developments at the firm in the past year include development of software for management of global small-cap and low p/e portfolios.

It has one tax-exempt client on retainer.

There are two professional consultants. Fees are payable in hard and soft dollars.

Its tax-exempt client is TIAA-CREF.

Gerald A. Pogue, president, is client contact.

Prime, Buchholz & Associates Inc.

1 Harbour Place, Portsmouth, N.H. 03801; (603) 433-1143

Prime, Buchholz & Associates Inc. provides overall development of policies and objectives and of appropriate asset allocation. Manager selection and performance measurement is offered for U.S., global/international and futures/options investments.

The firm also offers transaction cost analysis, analysis of cost effectiveness of custodial relationships and policy analysis of social responsibility investing.

Of the eight tax-exempt clients on retainer, two are corporate and six are foundation or endowment funds.

There are two professional consultants. Fees are payable in hard and soft dollars.

Tax-exempt clients include Boston College; Blue Cross/Blue Shield of Rochester, N.Y.; University of Massachusetts Foundation and Drury College.

James R. Buchholz and Jon L. Prime are client contacts.

Q

QUAN-VEST Consultants Inc.

390 Plandome Road, Manhasset, N.Y. 11030; (516) 365-4619

QUAN-VEST Consultants Inc. provides overall development of investment policies and objectives and of asset allocation. Manager selection and performance measurement and analysis are offered for U.S., real estate and GIC investments.

The firm provides computerized analysis of a 1,000 stock universe based on valuation earnings momentum, technical and composite factors to the investment management industry.

The firm has special expertise in tactical asset allocation and long-term asset allocation and providing multiemployer plans the equivalent of an inhouse investment supervision department.

Significant changes or developments at the firm in the past year include the development of a new service tracking equity turnover and commission analysis.

Of the 26 tax-exempt clients on retainer, six are corporate, one is public and 19 are union.

There are three professional consultants. Fees are payable in hard and soft dollars.

Tax-exempt clients include National Maritime Pension Trust, Uniformed Fire Officers, Textile Workers and Hotel Trade Council Pension Fund.

Anthony F. Lotruglio is client contact.

R

Reed Pension Consulting

300 E. Carpenter Freeway, Suite 1400, Irving, Texas 75062; (214) 541-1212

Reed Pension Consulting, a subsidiary of Reed Financial Group Inc., provides overall development of investment policies and objectives and of appropriate asset allocation. Manager selection and performance measurement and analysis are offered for U.S. investments.

The firm also offers extensive risk analysis.

The firm has special expertise in servicing the needs of small funds, generally under $20 million is assets.

Significant changes or developments at the firm in the past year include the addition of a computer programmer/analyst.

Of the 12 tax-exempt clients on retainer, 10 are corporate and two are union.

There are three professional consultants. Fees are payable in hard and soft dollars.

A separate subsidiary of the parent company offers brokerage services to soft-dollar clients.

Tax-exempt clients include Gruy Engineering, Asbestos Workers Local 21, Oriental Trading and El Paso Saw and Belting.

Peter H. Roe, vice president, is client contact.

Richards & Tierney Inc.

111 W. Jackson Blvd., 14th Floor, Chicago, Ill. 60604; (312) 461-1100

Richards & Tierney Inc., provides overall development of investment policies and objectives and of appropriate asset allocation. Performance measurement is offered for U.S., global/international, real estate, venture capital, LBO, private placement, futures/op-

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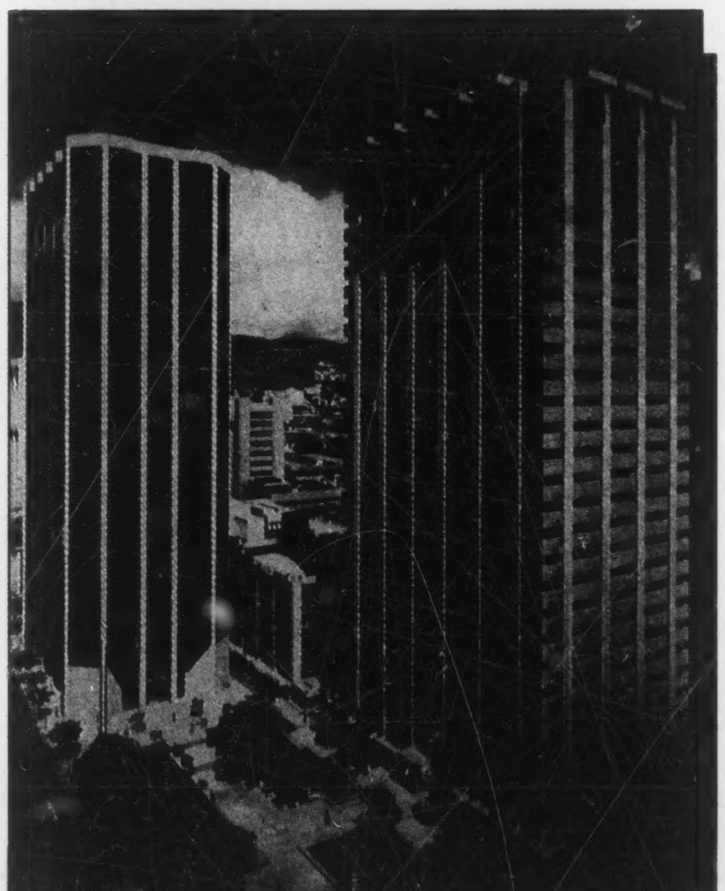

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tions and GIC investments. Performance analysis is offered for U.S. and global/international investments.

The firm also offers investment manager allocation service; benchmark portfolio design, development and maintenance; portfolio performance attribution; and portfolio risk analysis.

The firm provides the following to the investment management industry: benchmark portfolio design, development and maintenance, and portfolio performance attribution — for both domestic and international equity.

The firm has special expertise in benchmark portfolios, performance attribution, manager allocation and Dynamic Completeness Fund.

Significant changes or developments at the firm in the past year include the capability to design, develop and maintain benchmark portfolios for international equity managers.

Of the 16 tax-exempt clients on retainer, 10 are corporate, two are public, one is union and three are foundation or endowment funds. The firm also provided services to two corporate non-retainer tax-exempt clients during the past year.

There are seven professional consultants. Fees are payable primarily in hard dollars.

The firm offers the Dynamic Completeness Fund as an investment vehicle.

Tax-exempt clients include GE, Owens-Illinois, State of Minnesota and Hughes Aircraft.

Thomas M. Richards, principal, is client contact.

Rogers, Casey & Associates

85 Old Kings Highway North, Darien,
Conn. 06820; (203) 656-5900

Rogers, Casey & Associates Inc. provides overall development of investment policies and objectives and of appropriate asset allocation. Manager selection and performance measurement is offered for U.S., global/international, real estate, venture capital, LBO, private placements, futures/options and GIC investments.

The firm also offers normal portfolios and style and fulfillment funds.

The firm provides the following to the investment management industry: normal portfolio construction and assistance in formulating business strategies.

The firm has special expertise in providing extensive research of alternative investment sectors, and in creating special benchmark and development portfolios.

Significant changes or developments at the firm in the past year include the firm's name change from Rogers, Casey & Barksdale Inc.

Of the 30 tax-exempt clients on retainer, 27 are corporate, two are public and one is union. The firm has seven long-term, non-retainer tax-exempt clients, of which six are corporate and one is public. The firm also provided services to eight other non-retainer tax-exempt clients during the past year, of which seven were corporate and one was public.

There are 30 professional consultants. Fees are payable in hard and soft dollars.

Investment vehicles offered by the firm include venture capital funds management; segregated programs, including multimanager mutual fund programs; style funds matching portfolio characteristics of a "consensus manager" for a particular style; fulfillment funds passively buying sectors underweighted in the aggregate normal portfolio; and development funds with farm team manager programs.

Other financial services offered are advisory services evaluating investment management firms for potential merger or acquisition.

Tax-exempt clients include Eastman Kodak, New York City Teachers, Allied-Signal and Unisys.

James F. Beasley, chief operating officer, is client contact.

The Book of Lists will be published Dec. 25.

The Brian Rom Corp.

860 Fifth Ave., New York, N.Y. 10021;
(212) 724-7535

The Brian Rom Corp. provides overall development of investment policies and objectives and of appropriate asset allocation. Manager selection is offered for GIC investments. The firm also offers performance measurement and a data base of South Africa-free equity portfolios.

Asset allocation software, the Asset Allocation Expert, and integrated asset-liability projection software, the Pension Planning Expert, are offered to both sponsors and investment managers through a subsidiary, Sponsor-Software Systems Inc.

The firm has special expertise in development of investment policy and long-term asset allocation policy.

Significant changes or developments at the firm in the past year include the development of the two software systems mentioned above.

There are three professional consultants. Fees are payable in hard and soft dollars.

Tax-exempt clients include Peter J. Schmitt Co., Rich Products, Curtis, Mallet-Prevont and Colt & Morle.

Brian M. Rom, president, is client contact.

Roney Investment Management Services

1 Griswold, Detroit, Mich. 48226;
(313) 963-6700

Roney Investment Management Services, a subsidiary of Roney & Co., provides overall development of investment policies and objectives and of appropriate asset allocation. Manager selection and performance measurement and analysis are offered for U.S. and global/international investments.

The firm has special expertise in the development of asset allocation.

Of the 92 tax-exempt clients on retainer, 75 are corporate, 10 are public, five are union and two are foundation or endowment funds.

There are eight professional consultants. Fees are payable in hard and soft dollars.

Other financial services offered include full services brokerage, investment banking, mergers and acquisitions, municipal finance services, industrial development finance, corporate benefit plans, corporate valuations and business consulting.

Tax-exempt clients include City of Ypsilanti, Michigan Police and Fire, City of Big Rapids and Michigan Public Employees.

David A. Russo, director-investment management services, is client contact.

Roulac Real Estate Consulting Group

200 E. Randolph Drive, Chicago, Ill.
60601; (312) 856-8252

Roulac Real Estate Consulting Group, a unit of Deloitte Haskins & Sells, provides manager selection and performance measurement and analysis for real estate investments. The firm also offers policy and procedure development and property analysis.

The firm provides real estate consulting and valuations to the investment management industry.

The firm has special expertise in real estate investment decision-making.

There are two public tax-exempt clients on retainer. The firm has one public long-term, non-retainer tax-exempt client. The firm also provided services to two other public non-retainer tax-exempt clients during the past year.

There are 40 professional consultants. Fees are payable in hard dollars.

Other financial services, including audit, tax and systems consulting, are offered by the parent company.

Tax-exempt clients include California Public Employees and Texas Teachers.

Jake Young, senior manager, is client contact.

Rowland-Carmichael

2813 E. Camelback Road, Suite 400,
Phoenix, Ariz. 85016; (602)
955-1540

Rowland-Carmichael provides overall development of investment policies and objectives and of appropriate asset allocation. Manager selection and performance measurement are offered for U.S., private placements and GIC investments.

Of the 36 tax-exempt clients on retainer, 30 are corporate, three are union and three are foundation or endowment funds.

There are three professional consultants. Fees are payable in hard and soft dollars.

The firm offers a collective trust.

David L. Carmichael, president, is client contact.

Frank Russell Co.

P.O. Box 1616, Tacoma, Wash.
98401; (206) 572-9500

Frank Russell Co. provides overall development of investment policies and objectives and of appropriate asset allocation. Manager selection and performance measurement are offered for U.S., global/international, real estate, private placements and GIC investments.

The firm provides the following to the investment management industry: real estate and equity indexes, analytical software and asset/liability modeling.

The firm has special expertise in performance measurement, research, asset allocation and manager research.

Significant changes or developments at the firm in the past year include research into the globalization of assets and development of analytical systems and indexes for non-U.S. investments and capital markets.

There are 40 tax-exempt clients on retainer.

Fees are payable in hard and soft dollars.

Tax-exempt clients include Xerox, AT&T, Chevron and Oregon.

Tony Whatley, director of marketing, is client contact.

Russell-Zisler Inc.

1 Palmer Square, Princeton, N.J.
08542; (609) 924-8558

Russell-Zisler Inc., a subsidiary of Frank Russell Co., provides overall development of real estate investment policies and objectives and appropriate real estate asset allocation. Real estate manager selection and performance measurement and analysis are featured.

The firm also offers real estate independent fiduciary and due diligence; real estate financial consulting; portfolio management; and risk analysis.

The firm has special expertise in real estate finance, portfolio analysis, workouts and due diligence.

Significant changes or developments at the firm in the past year include the addition of six professionals.

There are nine professional consultants. Fees are payable in hard and soft dollars.

Randall Zisler, president, is client contact.

S

Segal Advisors Inc.

730 Fifth Ave., New York, N.Y. 10019;
(212) 586-5600

Segal Advisors Inc., a subsidiary of Martin E. Segal Co., provides overall development of investment policies and objectives and of appropriate asset allocation. Manager selection and performance measurement and analysis are offered for U.S., global/international, real estate, venture capital, futures/options and GIC investments.

The firm also offers master trust services consulting, brokerage cost analysis and management fee negotiation.

The firm has special expertise in relating investment programs to actuarial characteristics of benefit plans.

Significant changes or developments at the firm in the past year include the devotion of significant resources to nuclear decommissioning trust services and to GIC-related consulting services.

There are 80 tax-exempt clients on retainer. The firm also provided services to 15 non-retainer tax-exempt clients during the past year.

There are eight professional consultants. Fees are payable in hard dollars.

Tax-exempt clients include the American Cancer Society, Suburban Propane Gas, Wyoming Retirement

Investment Advisors...
to employee benefit plans, foundations, endowments and substantial individuals.

Our basic investment philosophy — the prudent investment of assets in undervalued securities and special situations — was established a half century ago. This approach has preserved and appreciated capital over many market cycles.

David J. Greene and Company
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Martin Levenson, senior vice president and actuary, and Irving Rotkowitz, senior vice president, are client contacts.

SEI Corp.

680 E. Swedesford Road, Wayne, Pa. 19087; (215) 254-1000

SEI Corp. provides overall development of investment policies and objectives and of appropriate asset allocation. Manager selection and performance measurement and analysis are offered for U.S., global/international, real estate, venture capital, LBO, private placements, futures/options and GIC investments.

The firm also offers asset/liability planning, on-going trading analysis, master trustee evaluation and auditing and special research and development.

The firm provides the following to the investment management industry: domestic and international performance evaluation and consulting; trading cost analysis and consulting; and on-going marketing and business consulting.

The firm has special expertise in handling fiduciary responsibility for providing full pension administration and investment support; real estate consulting; and asset/liability planning.

Of the 290 tax-exempt clients on retainer, 170 are corporate, 88 are public, 23 are union and nine are foundation or endowment funds. The firm has 1,350 long-term, non-retainer tax-exempt clients, of which 1,000 are corporate, 150 are public, 105 are union and 95, foundation or endowment funds.

There are 170 professional consultants. Fees are payable in hard and soft dollars.

Tax-exempt clients include State of Florida, Halliburton, Massachusetts Bay Transportation and Olin.

Edward D. Loughlin, senior vice president, is client contact.

Shearson Lehman Hutton Consulting Group

141 W. Jackson Blvd., Suite 211A, Chicago, Ill. 60604; (312) 435-3075

Shearson Lehman Hutton Consulting Group, a subsidiary of Shearson Lehman Hutton Inc., provides overall development of investment policies and objectives and of appropriate asset allocation. Manager selection and performance measurement are offered for U.S. and global/international investments.

Performance analysis is offered for U.S. investments.

Significant changes or developments at the firm in the past year include the addition of staff and enlargement of the scope of its investment manager evaluation service.

Of the 174 tax-exempt clients on retainer, 31 are corporate, 49 are public, 53 are union and 41 are foundation or endowment funds.

There are 126 professional consultants.

Fees are payable in hard and soft dollars.

The firm can provide full consulting and investment manager services through the Shearson Lehman Hutton Select program.

Trust services are offered through Shearson Lehman Hutton Trust Co.

Tax-exempt clients include Kansas Power & Light/Gas Service, City of Cincinnati, University of Arizona Foundation and the Brotherhood of Maintenance of Way Employees.

David J. Shanahan, first vice president, is client contact.

Shubert Rizor Securities Inc.

604 Courtland St., Suite 200, Orlando, Fla. 32804; (407) 645-3295

Shubert Rizor Securities Inc., a subsidiary of the Capital Gains Financial Group, provides overall development of investment policies and objectives and of appropriate asset allocation.

Manager selection and performance measurement and analysis are offered for U.S., real estate, futures/options and GIC investments.

The firm has special expertise in advising 501(c) organizations and consulting to sports-related organizations, conferences and coaches' retirement plans.

Significant changes or developments at the firm in the past year include a strong increase in the client base.

The firm has 85 long-term, non-retainer tax-exempt clients. Of those 85 tax-exempt clients, 15 are corporate and 70 are public.

There are five professional consultants.

Fees are payable in hard and soft dollars.

The firm offers a proprietary mutual fund timing system and complete discretionary investment management to clients.

Brokerage, proprietary real estate partnerships, limited partnerships and general financial planning are among other financial services offered by the firm.

James F. Parker and William Jackob, senior vice presidents, are client contacts.

Jeffrey Slocum & Associates

7301 Ohms Lane, Suite 310, Minneapolis, Minn. 55435; (612) 893-1955

Jeffrey Slocum & Associates Inc. provides overall development of investment policies and objectives and of asset allocation. Manager selection and performance measurement and analysis are offered for U.S., global/international, real estate, venture capital, LBO, private placements, futures/options and GIC investments.

The firm also designs customized communication programs for defined contribution plan participants.

The firm has special expertise in asset/liability modeling, particularly projecting FASB 87 effects, investment performance attribution and risk identification.

Significant changes or developments at the firm in the past year include the addition of a senior level consultant.

Of the 40 tax-exempt clients on retainer, 16 are corporate, six are public, 10 are union and eight are foundation or endowment funds. The firm also provided services to 11 non-retainer tax-exempt clients during the past year, of which four were corporate, two were public, two were union and three were foundation or endowment clients.

There are four professional consultants. Fees are payable in hard and soft dollars.

Tax-exempt clients include Amherst H. Wilder Foundation, Blue Cross/Blue Shield of Minnesota, Iowa Peace Officers and Super Valu Stores.

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Jeffrey C. Slocum, president, is client contact.

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1345 Avenue of the Americas, 23rd
Floor, ACE Dept., New York, N.Y.
10105; (212) 698-6000

Smith Barney, Harris Upham & Co. Inc., a subsidiary of Primerica Corp., provides overall development of investment policies and objectives. U.S. investment manager selection and performance measurement and analysis also are offered.

The firm has special expertise in consulting to the small and midsize market pension and profit-sharing plans with assets between $500,000 and $10 million.

Significant changes or developments at the firm in the past year include the startup of the Asset Consulting Evaluator Department.

The firm has 70 long-term, non-retainer tax-exempt clients. The firm has provided services to 1,000 tax-exempt clients during the past year.

Fees are payable in hard and soft dollars.

The parent company is a full-service investment bank and securities firm.

Ruth J. Harris, managing director and national product manager, is client contact.

Southeastern Advisory Services Inc.

10 Piedmont Center, Suite 302,
Atlanta, Ga. 30305; (404) 237-3156

Southeastern Advisory Services Inc. provides overall development of investment policies and objectives and of asset allocation. Manager selection and performance measurement is offered for U.S., global/international, real estate and GIC investments. Performance analysis is offered for U.S. and global/international investments.

The firm also offers monitoring and evaluation of established policies and guidelines, and the design and implementation of plan expense reduction programs.

The firm has special expertise in manager searches and performance evaluation. It offers a proprietary data base of Southeastern-based investment managers. Portfolio risk and diversification is offered through asset allocation analysis.

The firm added 11 tax-exempt clients during the previous 12 months.

There are four professional consultants. Fees are payable in hard and soft dollars.

Tax-exempt clients include Georgia Firemen, Peace Officers of Georgia, Appalachian State University and Krystal Co.

Angela Z. Sessler and Bishop F. Smith Jr., managing principals, are client contacts.

Stratford Advisory Group

120 S. Riverside Plaza, Suite 1456,
Chicago, Ill. 60606; (312) 902-1985

Stratford Advisory Group Inc. provides overall development of investment policies and objectives and of asset allocation. Manager selection and performance measurement are offered for U.S., global/international and real estate investments.

The firm also offers strategic asset allocation and cost containment.

The firm has special expertise in asset allocation and real estate consulting.

Of the 24 tax-exempt clients on retainer, eight are corporate, one is union and 15 are foundation or endowment funds. The firm has seven long-term, non-retainer tax-exempt clients, of which one is public, one is union and five are foundation or endowment funds. The firm also provided services to one other union non-retainer tax-exempt client during the past year.

There are five professional consultants. Fees are payable in hard and soft dollars.

Tax-exempt clients include the Art Institute of Chicago, Knight-Ridder, Public Service Indiana and the Sheet Metal Workers' National Pension Fund.

Jeffrey Willott is client contact.

T

The Townsend Group

1419 W. Ninth St., Cleveland, Ohio
44113; (216) 781-9090

The Townsend Group provides overall development of investment policies and objectives. Manager selection and performance measurement and analysis are offered for real estate and real estate private placements.

The firm also offers property-specific due diligence, market and lease analyses, research for market trends and economic forecasts. Performance measurement includes comparison to relevant indexes, as well as to like transactions of other firms.

Significant changes or developments at the firm in the past year include the formation of Townsend/Wharton Real Estate Data Systems, with the Wharton School of the University of Pennsylvania. The joint venture's purpose was to improve performance, measurement and tracking of real estate advisors and their individual investments. A research department was formed exclusively for the purpose of analysis of market trends and for special project requests.

Of the 15 tax-exempt clients on retainer, two are corporate, seven are public and six are union.

Fees are payable in hard dollars.

Tax-exempt clients include the City & County of San Francisco, Detroit General Retirement System, Inland Steel and Blue Cross/Blue Shield.

Terrance R. Ahern and Kevin W. Lynch are client contacts.

TPF&C

950 E. Paces Ferry Road, Atlanta,
Ga. 30326-1119; (404) 365-1745

TPF&C, a subsidiary of Towers Perrin, provides overall development of investment policies and objectives and of asset allocation. Manager selection is offered for U.S., global/international, real estate, venture capital, LBO, private placements, futures/options and GIC investments. Performance measurement is offered for U.S. investments, while performance analysis is offered for U.S., global/international and GIC investments.

The firm also offers investment policies and manager selection for all forms of insurance assets.

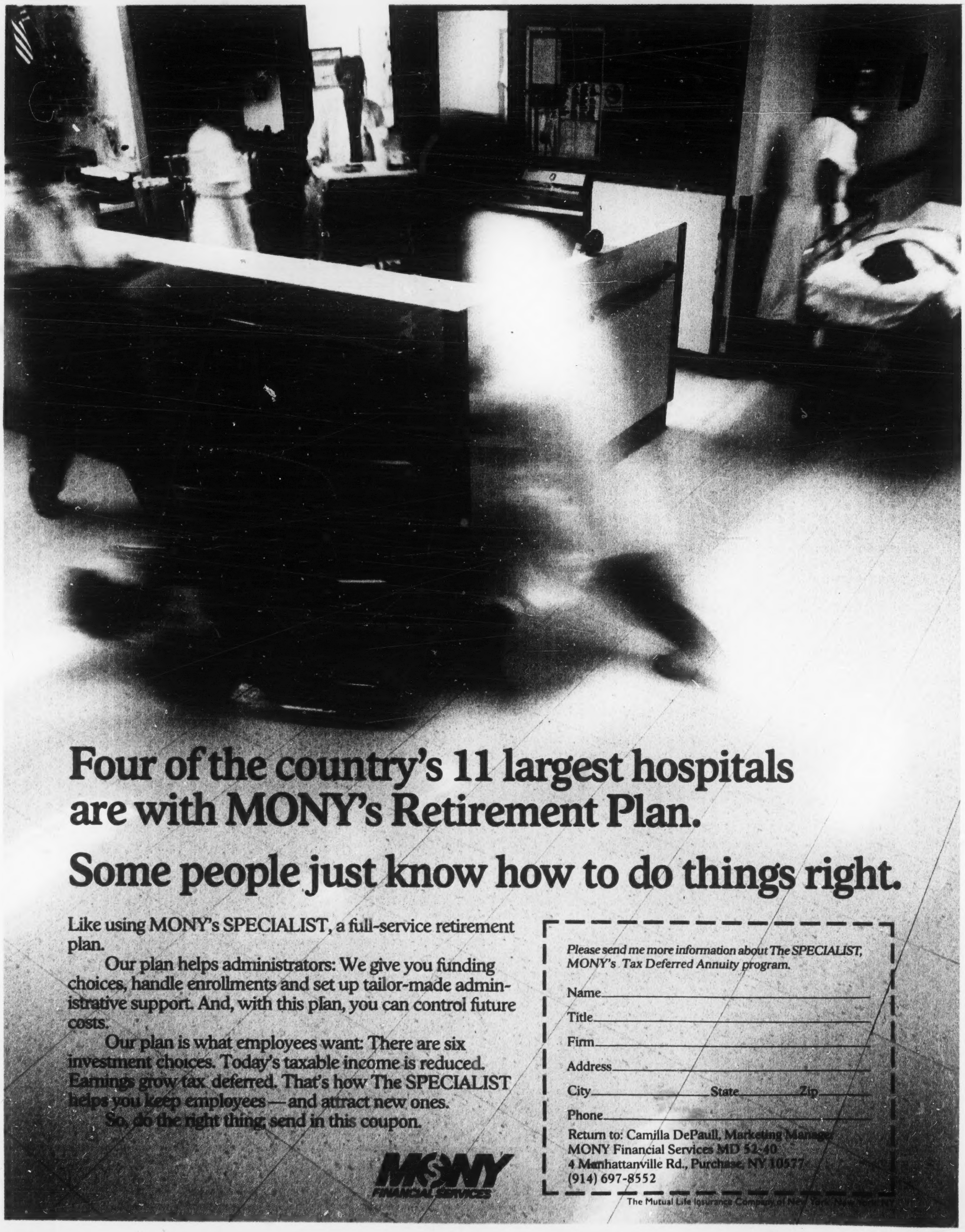
The firm has special expertise in asset/liability forecasting, global/international manager searches and GIC/annuity consulting.

Significant changes or developments at the firm in the past year include key additions to senior professional staff and the extension of the TPF&C worldwide asset consulting network to include Canada, the United Kingdom, Australia and Switzerland.

Fees are payable in hard dollars.

Roger C. Bransford, national director-asset consulting, is client contact.

Social investing: Nov. 27.



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Tremont Partners Inc.

39 Pine St., New Canaan, Conn.
06840; (203) 966-4074

Tremont Partners Inc., a subsidiary of Lynch Asset Management Co., provides overall development of investment policies and objectives and of appropriate asset allocation. Manager selection and performance measurement and analysis are offered for U.S., global/international, real estate, venture capital, LBO, private placements, futures/options and GIC investments.

The firm provides assistance to the investment managers in the design and implementation of pooled funds.

The firm has special expertise in the design and establishment of 401(k) investment options and in monitoring and selecting investment limited partnerships.

Significant changes or developments at the firm in the past year include the addition of Mary Ann Johnson as president.

There are three professional consultants. Fees are payable in hard and soft dollars.

The firm also specializes in the design, implementation and monitoring of multimanager pooled funds of financial intermediaries, such as banks and insurance companies.

Sandra L. Manzke, chairman, is client contact.

V

Vantage Consulting Group

P.O. Box 1507, Virginia Beach, Va.
23451; (804) 491-2998

Vantage Consulting Group provides overall development of investment policies and objectives and of asset allocation. Manager selection is offered for U.S., real estate, private placements and futures/options investments. Performance measurement is offered for U.S., private placements and futures/options investments. Performance analysis is offered for U.S. and futures/options investments.

The firm provides contract research, development and diagnostics for investment management firms.

Of the three tax-exempt clients on retainer, one is corporate, one is public and one, union.

There are five professional consultants. Fees are payable in hard dollars.

William P. Deuchler, president, is client contact.

Venture Economics Inc.

75 Second Ave., Suite 700,
Needham, Mass. 02194; (617)
449-2100

Venture Economics Inc. provides overall development of investment policies and objectives. Manager selection and performance measurement and analysis are offered for venture capital, LBO and private placements investments.

The firm also provides investment decision support services; portfolio analysis; performance reports; investment manager directories; monthly journals; annual investor conferences; special seminars; and custom research reports.

The firm has special expertise in its data base of venture capital and venture banking managers. Private placement investment activity is tracked worldwide.

Fees are payable in hard and soft dollars.

Linda Vincent, senior vice president, is client contact.

Pensions & Investment Age welcomes letters.
Letters should include name, address and the company of the writer.

W

Washington Hackett, Smith

147 Carondelet St., Suite 1125, New
Orleans, La. 70130; (504)
865-1118

Washington Hackett, Smith & Co. provides overall development of investment policies and objectives and of appropriate asset allocation. Manager selection and performance measurement are offered for U.S., global/international, real estate, venture capital, private placements, futures/options and GIC investments. Performance analysis is offered for U.S. investments.

The firm has special expertise in women- and minority-owned investment managers.

There are five public tax-exempt clients on retainer. The firm has four long-term, non-retainer tax-exempt clients, of which three were public and one, union. The firm provided services to one other non-retainer public tax-exempt client during the past year.

There are three professional consultants. Fees are payable in hard or soft dollars.

Tax-exempt clients include Seattle Employees, Philadelphia Sinking Fund Retirement System, Denver Water Department, California Public Employees and City of Houston.

Christian M. Washington and Valerian Butler-Smith, principals, are client contacts.

Wellesley Group Inc.

800 South St., Watermill Center,
Waltham, Mass. 02154; (617)
891-3636

Wellesley Group Inc. provides overall development of investment policies and objectives and of asset allocation. Manager selection and performance measurement and analysis are offered for U.S., global/international, real estate, venture capital and futures/options investments. Master trustee/custodian searches and selection also are offered.

The firm has special expertise in manager peer group analysis; performance attribution studies; asset/liability matching; and long-term asset allocation studies. The firm has expertise in consulting to foundations and endowments.

Significant changes or developments at the firm in the past year include expansion of its manager data base, the introduction of summary reports and improved graphics capabilities.

Of the 35 tax-exempt clients on retainer, nine are corporate, four are public and 22 are foundation or endowment funds. The firm also provided services to one non-retainer foundation or endowment client during the past year.

There are six professional consultants. Fees are payable in hard and soft dollars.

Tax-exempt clients include Baystate Health Systems, Chicago Transit Authority, Washington University and Washington Suburban Sanitary Commission.

Ned A. Joachimi, chairman and chief executive officer, and Pamela A. Joachimi, assistant vice president and associate, are client contacts.

Wilshire Associates

1299 Ocean Ave., Suite 700, Santa
Monica, Calif. 90401; (213)
431-3051

Wilshire Associates provides overall development of investment policies and objectives and of asset allocation. Manager selection and performance measurement and analysis are offered for U.S., global/international, real estate, private placements, futures/options and GIC investments.

The firm also offers corporate finance and mutual fund consulting.

The firm has special expertise in asset allocation; manager selection; investment structure; portfolio risk analysis; and cost containment.

Significant changes or developments at the firm in the past year include the promotion of Stephen L. Nesbitt to run the consulting division; the startup by Lawrence E. Davanzo of the international division; the introduction of international equity and fixed-income products were introduced; and the development of a minority- and women-owned investment management firm data base.

Of the 71 tax-exempt clients on retainer, 38 are corporate, 23 are public and 10 are foundation or endowment funds. The firm provided services to three non-retainer tax-exempt clients during the past year, of which two were corporate and one was public.

There are eight professional consultants. Fees are payable in hard and soft dollars.

Other financial services offered include corporate finance consulting. Other divisions of Wilshire provide venture capital and LBO consulting, brokerage, asset management and international consulting.

Tax-exempt clients include California Public Employees, Pennsylvania Public Employes, Westinghouse and Goodyear.

Stephen L. Nesbitt, vice president, is client contact.

The World Markets Co.

375 Park Ave., Suite 3207, New York,
N.Y. 10152; (212) 593-4747

The World Markets Co., a subsidiary of Bankers Trust Co., provides performance measurement and risk analysis for international and global investments.

The firm provides performance evaluation to the investment management industry.

The firm has special expertise in attribution analysis for global/international portfolios and the ability to produce analysis in any designated currency against any benchmark.

Significant changes or developments at the firm in the past year include the development of global bond universes and a separate risk product, the WM Spectrum.

Fees are payable in hard and soft dollars.

Other financial services offered include a multicurrency accounting system.

Angela P. Docherty, vice president-sales and marketing manager, is client contact.

Wurts, Johnson & Co.

1111 Third Ave., Suite 1200, Seattle,
Wash. 98101; (206) 622-3700

Wurts, Johnson & Co., an affiliate of Howard Johnson & Co., provides overall development of investment policies and objectives and of asset allocation. Manager selection and performance measurement and analysis are offered for U.S., global/international, real estate, venture capital, futures/options and GIC investments.

The firm also offers attribution analysis of equity and fixed-income returns and asset/liability modeling, with a special fund model for endowments and foundations.

The firm has special expertise in asset/liability modeling, 401(k) investment options analysis and manager selection.

Significant changes or developments at the firm in the past year include the addition of two professionals and one staff person.

Of the 75 tax-exempt clients on retainer, 54 are corporate, three are public, 12 are union and six are foundation or endowment funds. The firm also provided services to 10 non-retainer tax-exempt clients during the past year, of which eight were corporate, one was public and one, a foundation or endowment.

There are three professional consultants. Fees are payable in hard and soft dollars.

Tax-exempt clients include Nordstrom, Nevada Power, Washington Natural Gas and Alaska Airlines.

Brian Cathcart and Eric Nelson are client contacts.

Wyatt Asset Services

303 W. Madison St., Suite 2400,
Chicago, Ill. 60606; (312) 704-2551

Wyatt Asset Services, a subsidiary of The Wyatt Co., provides overall development of investment policies and objectives and of asset allocation. Manager selection and performance measurement and analysis are offered for U.S., global/international, real estate and GIC investments.

The firm also offers attribution analysis for stock and bond portfolios; plan and manager level global performance analysis; and GIC/BIC evaluations and optimizations.

The firm has special expertise in asset/liability modeling and insurance asset consulting.

Significant changes or developments at the firm in the past year include the enhancement of international consulting capability and the development of GIC/BIC analytical software.

There are 11 professional consultants. Fees are payable in hard dollars.

Philip J. Schneider, U.S. practice chairman, is client contact.

Y

Yanni-Bilkey Investment Consulting Co.

2500 Grant Building, Pittsburgh, Pa.
15219; (412) 232-1000

Yanni-Bilkey Investment Consulting Co. provides overall development of investment policies and objectives and of asset allocation. Manager selection and performance measurement are offered for U.S., global/international, real estate, venture capital, LBO, private placements, futures/options and GIC investments. Performance analysis is offered for U.S. and global/international investments.

The firm also offers proprietary software that permits a detailed attribution analysis. Risk levels on each investment category are calculated, as well as risk-adjusted returns. The firm provides the GRID and CASH statistical data base services. GRID is used for portfolio classification/ranking for performance measurement; CASH is used for evaluation of short-term managed funds. Separate universes on international, real estate and GIC portfolios are available.

The firm has special expertise in midsize and hospital funds.

Significant changes or developments at the firm in the past year include the formation of the firm in January 1989 and the acquisition of the Butcher Consulting Group.

Of the 82 tax-exempt clients on retainer, 23 are corporate, seven are public, five are union, 12 are foundation or endowment funds, 31 are hospitals and four are in other categories. The firm has 23 long-term, non-retainer tax-exempt clients, of which 10 are corporate, two public, two union, four are foundation or endowment funds, four are hospitals and one in other categories. The firm provided services to 18 other non-retainer tax-exempt clients during the past year, of which seven were corporate, two were public, two were union, three were foundation or endowment, three were hospitals and one was in other categories.

There are six professional consultants. Fees are payable in hard and soft dollars.

Tax-exempt clients include City of Pittsburgh, Unihealth America, Duquesne Light and Coopers & Lybrand.

James E. Yanni and Terry Bilkey, principals, are client contacts.

SEI moves toward a presence in defined contribution market

By Barry B. Burr

WAYNE, Pa. — Recognizing the growing importance of defined contribution plans, SEI Inc. acquired National FSI Inc., Dallas, a firm specializing in defined-contribution services, and added a guaranteed investment contract advisory group.

National FSI offers record-keeping, administration, plan design and other services to sponsors of defined contribution plans — all new areas for SEI, said Ed Loughlin, SEI senior vice president.

SEI's new GIC advisory group, based in Boston, is run by William Hannon, who joined SEI from William M. Mercer Meidinger Hansen Inc., for which he was principal in its Boston office, also overseeing GIC advisory services.

"In the defined contribution area, so many of the assets (about 70%) are invested in GICs," or similar instruments, such as or bank investment contracts, he said. So providing GIC and BIC quotes and placement "is a very critical piece of business" in consulting to defined contribution plans.

"We didn't offer any kind of capability in the GIC area before," Mr. Loughlin added.

SEI's GIC group will offer pension sponsors quotes on GICs, BICs and savings and loan association investment contracts. It will negotiate terms of contracts, make placements and assess the quality of the insurance company's ability to guarantee payment. In addition, it will negotiate early withdrawals.

"SEI is trying to move in the direction of business opportunity," said Dave Eager, principal, Eager & Associates, Louisville, Ky., a firm that specializes in consulting to money managers.

"The movement to defined contribution plans isn't a benefit to consultants," he said. "There is less need for consultants in defined contribution plans."

Consultants have to broaden their services beyond those traditionally offered to defined benefit sponsors, as SEI is doing, to capture more defined contribution business, he added.

"It certainly has a lot of growth potential," Mr. Loughlin added of the defined contribution market.

With the FSI acquisition and the new GIC group, SEI now "has to offer a full complement of defined contribution services," Mr. Loughlin said.

"More and more sponsors are looking for consolidation relationships, even money management," he said.

Unlike with their defined benefit plans, sponsors prefer to consolidate their defined contribution plans with one or a few outside consultant or management firms for record-keeping, administration, performance evaluation and investment management, he said. In money management, SEI offers to pension sponsors through bank trust departments a group of mutual funds, managed by outside investment advisers SEI hires.

FSI had 250 clients, Mr. Loughlin said. SEI paid $20 million for FSI, which will be absorbed in SEI. Its staff, however, will continue to operate from Dallas. ■

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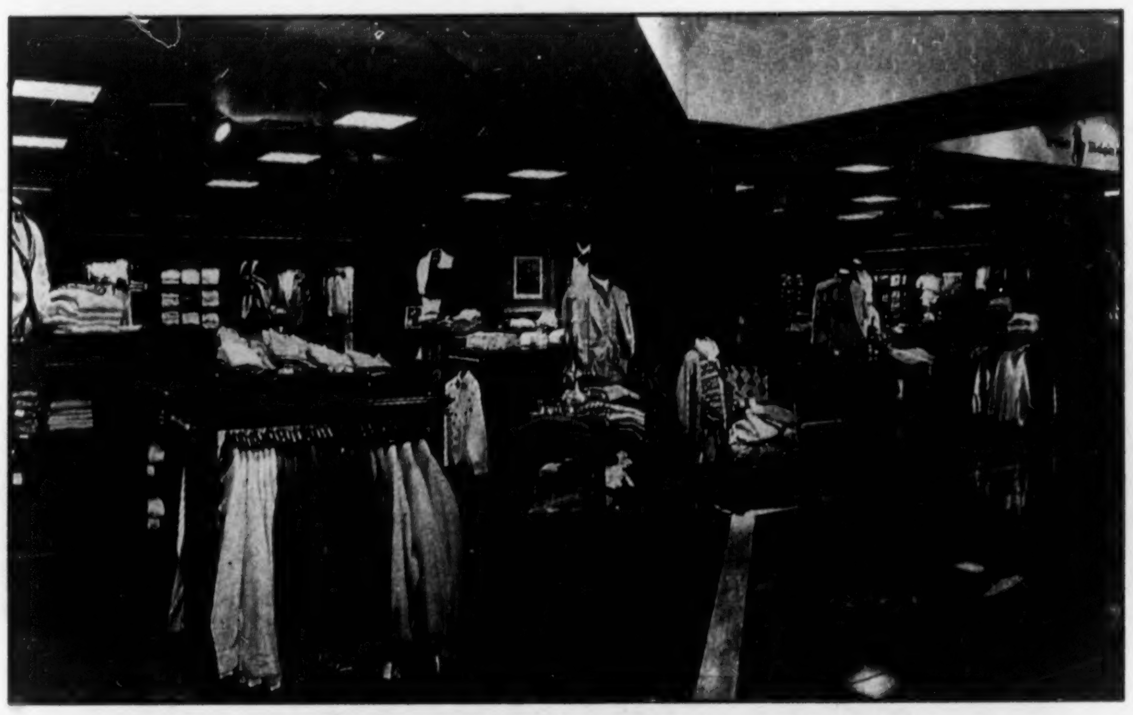
PENSIONS & November 27, 1989
Investment Age
THE NEWSPAPER OF CORPORATE AND INSTITUTIONAL INVESTING
$6 AN ISSUE · $110 A YEAR

Advisers asked to wait

Dayton Hudson sets guidelines on tender offers

By Marcia Parker



Retailer Dayton Hudson has asked its money managers to wait for the opinion of target company boards in hostile takeovers.

MINNEAPOLIS — Dayton Hudson Corp. has asked its pension fund money managers to delay tendering shares in hostile takeovers until the target company's board takes a position.

Although some companies might have informal guidelines that are similar, Dayton Hudson likely is the first company to revise its investment guidelines to incorporate the new thinking.

Two years after fending off a hostile takeover themselves, Chairman Kenneth Macke and the Dayton Hudson board of directors approved carefully worded investment guidelines that say they would "prefer" shares not be tendered until the target company's board recommends a course of action.

The board of the Minneapolis-based retailer, contending the risks don't justify the rewards, also reaffirmed an existing policy barring money managers from investing company pension assets in leveraged buy-outs or other investments whose primary purpose is to put companies into play.

The new policy, explained this month in a letter to the 21 money managers of the company's employee benefit assets, seems to reflect Dayton Hudson's interpretation of the position of the Labor and Treasury departments. Early

Continued on page 45

Firms top S&P in long run

P&I Age unveils PIPER+ for manager performance

By Michael Clowes

More than half of the regular equity managers in the PIPER+ universe had returns greater than the Standard & Poor's 500 Stock Index for the five and 10 years ended Sept. 30 but underperformed during shorter periods.

In addition, 61% of the portfolios in the universe had positive risk-adjusted returns, as measured by alpha, for the five-year period.

For the five years, the median equity return of the PIPER+ universe was 20.6%, compared with 20.3% for the S&P 500 index. For the 10-year period, the median PIPER+ equity return was 18.7% compared with 17.35% for the S&P. All returns for more than one year are compound annualized.

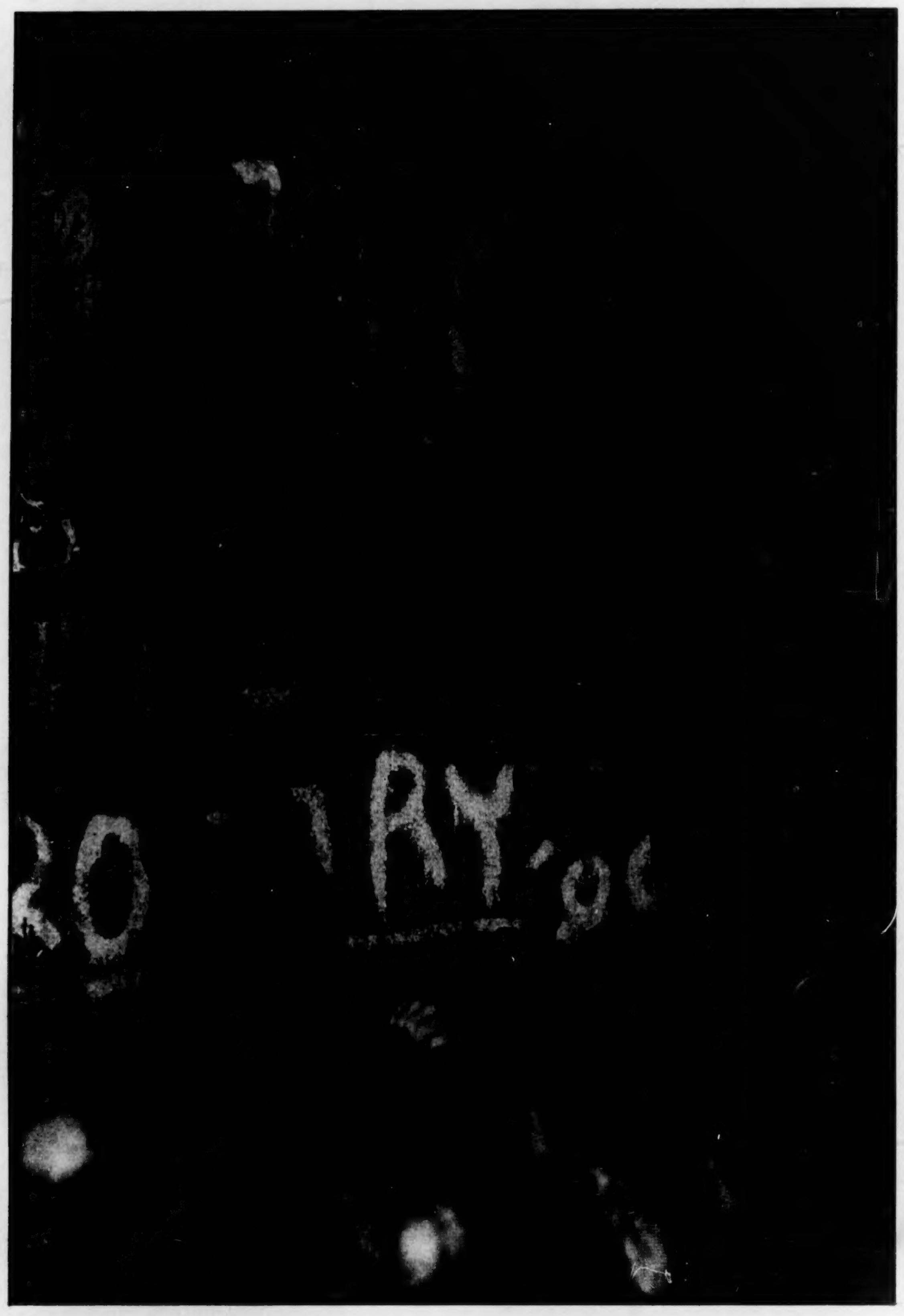
The PIPER+ universe is a new universe of 318 equity, 204 fixed-income, 60 special equity and 115 tactical asset allocation and balanced investment counseling firm accounts or separately managed accounts of banks and insurance companies compiled for *Pensions & Investment Age* by Rogers, Casey & Associates, Darien, Conn. The original PIPER universe covers only bank and insurance company commingled accounts.

The PIPER+ universe is summarized for the first time in this issue of *P&I Age*, and the full report is now available on a subscription basis. (*Listings of the firms in the top two deciles for regular equity and fixed-income accounts begin on page 18. Top special equity and TAA/balanced accounts will be listed Dec. 11.*)

Continued on page 45

Equity funds
(periods ended Sept. 30, 1989)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	24.1 %	63.14%	43.05%	37.45%	27.33%
First quartile	12	35.08	20.44	21.98	21.05
Median	9.96	30.47	17.95	20.59	18.88
Third quartile	7.88	25.69	16.04	18.41	17.2
Lowest return	2.02	8.86	2.83	11.56	4.98
S&P 500	10.73	32.83	18.84	20.3	17.35



The falling of barriers between East and West Germany could create new opportunities for institutional investors.

Investors cautious on West Germany

By Margaret Price

With the dramatic breaching of the Berlin Wall and the prospects for greater integration between East and West Germany, many institutional investors are boosting their long-term outlooks for West Germany's economy and stock market while remaining cautious for the near term.

At least one U.S. money manager — Morgan Stanley Asset Management — already has plunged into the market, raising its West Germany weighting on international portfolios to 12% from 6%. (The Morgan Stanley Capital International Europe Australia Far East Index has a 5% weighting in West Germany.)

Barton Biggs, chairman of the New York money management firm, believes investors should to act now, before German stock prices — which recently rebounded from their Oct. 16 plunge — get much higher. "For all practical purposes, Germany will be unified, politically or de facto economically," Mr. Biggs said. And West Germany will gain a huge new market "to sell into or in which to build plants."

Indeed, economic prospects have brightened for West Ger-

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LATE NEWS

Employers to retain surpluses

WASHINGTON — Employers would be able to continue to recover surplus assets after terminating overfunded pension plans, while ESOPs would lose a key tax break under budget legislation that was expected to receive final congressional approval last week.

Congressional negotiators agreed to drop a provision — contained in the House's budget bill — that would have banned employers from recovering excess assets after terminating an overfunded plan, while giving the participants the surplus.

Negotiators also agreed on a provision under which lenders generally no longer could exclude from their taxable income 50% of interest earned from loans made to employee stock ownership plans. That provision, however, generally would not be imposed in situations in which the ESOP holds at least 50% of outstanding company stock.

Lomas Capital closing its doors

DALLAS — Lomas Capital Management, a division of Lomas Financial Corp., will be shut down because of the difficulty in marketing the money management firm following the Chapter 11 filing by Lomas Financial.

Clark Manning, chief investment officer at Lomas Capital, said the company will be "phased out by mutual agreement by the end of the year."

"The Chapter 11 filing by Lomas Financial has made it very difficult for us to market our services, and Lomas has decided to go back to its primary line of business" of real estate financing, said Mr. Manning.

Lomas Capital has 12 clients and about $210 million under management, about $55 million of that from various Lomas affiliates and most of it tax-exempt.

Funds shift managers, assets

- SAN ANTONIO, Texas — The $216 million San Antonio Firemen and Policemen's pension fund hired Mitchell Hutchins Institutional Investors, New York, to manage more than $70 million in indexed assets, and Avatar Associates, New York, to manage 5% of total assets as a tactical asset allocator.

Carlos Resendez, executive director, said Mitchell Hutchins will manage two portfolios for the pension fund, a Standard & Poor's 500 Stock Index portfolio and a Shearson Lehman Hutton Government/Corporate Intermediate Index portfolio. The assets now under management by Mitchell Hutchins will be temporarily "parked" with Mitchell Hutchins, Mr. Resendez said, until sometime next year when the pension fund will begin investing in international, venture capital and real estate.

Mr. Resendez said National Commerce Bank in San Antonio, which was a fixed-income manager and custodian, was dismissed. The new custodian is Northern Trust Co. The $50 million NCB managed was turned over to Mitchell Hutchins, and the rest came from assets under management by Daniel Breen & Co., Houston, and Austin & Calvert Inc., San Antonio. The pension fund took some money away from those two managers to give to Mitchell Hutchins.

- MILWAUKEE — The board for the $750 million Milwaukee County Employees' Retirement System approved a transfer of $25 million from the equity account run by Loomis, Sayles & Co., Milwaukee, to its fixed-income accounts to meet asset class guidelines.

Board Trustee Marvin Seeger said the move was made because the system's equity assets had grown above the 45% exposure target.

Mr. Seeger said the board hadn't yet decided how to allocate the $25 million among the system's three fixed-income managers: Loomis Sayles; Stein, Roe & Farnham Inc., Chicago; and Dana Investment Advisors, Brookfield, Wis.

- ROCHESTER, N.Y. — The $110 million Bausch & Lomb Inc. pension fund has hired The Boston Co. to manage a guaranteed investment portfolio for them beginning Jan. 1, according to David Davenport, manager of domestic treasury operations.

Mr. Davenport said Boston Co. will receive monthly contributions, expected to total $3 million per year.

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Scorecard questionnaires in the mail

Questionnaires are in the mail for *Pensions & Investment Age*'s annual Scorecard report on investment managers' new business. In order to be included in the Feb. 5 report, money managers must return the questionnaires by Dec. 31. If you have any questions, please contact Christine Philip, directory coordinator, at (312) 649-5217.

401(k) dispute sparks suit

Crestar's real estate fund lacks cash to meet withdrawals

By Steve Hemmerick

ALEXANDRIA, Va. — Administrators of a 401(k) savings plan for two national magazines have filed suit against Crestar Bank, Richmond, Va., seeking to free $2 million in plan assets from a troubled real estate fund.

The suit was filed by the U.S. News & World Report/The Atlantic Monthly profit sharing plan, Washington, in U.S. District Court in Alexandria, Va., and charged Crestar Bank with defrauding the plan.

The suit also asks the court to impose treble damages on Crestar, the amount to be determined by the court.

The magazines' $20 million profit-sharing plan is among the estimated 130 investors in Crestar Bank Real Estate Fund. Participants thought they could withdraw the $2 million in assets in a little more than one month from what the bank had described as a highly liquid real estate fund, according to interviews and court documents.

But the employees said they have been told by bank officials that the real estate assets in the trust are declining in value and the employees probably won't be able to get completely out of the fund for two to five years.

Bank officials, the employees and court papers said, told them withdrawals from all investors in the fund have exceeded deposits for the last three years, and cash isn't available to cash out the magazines' 401(k) plan.

Having defined contribution plan assets locked in a real estate fund is uncommon because there are few real estate options for such plans, mainly because of the liquidity problem, said Robert Penter, a consultant with Hewitt Associates, Lincolnshire, Ill.

The suit, filed by the law firm of Shaw, Pittman, Potts & Trowbridge, Washington, said at least two other trust participants in the real estate trust also tried unsuccessfully to withdraw their assets from the trust. The two were not identified.

Bank officials denied any wrongdoing and said they would "vigorously" defend against the employee suit.

Bank officials would supply little information about the real estate fund, which they are liquidating. In a prepared statement, they said the decision to liquidate was made in the "best interests" of all participants and is consistent with the requirements of the

Continued on page 44

Some investors in GE, whose appliance line is only part of its business, sought a special dividend.

GE buyback lights up investors

By Marcia Parker

FAIRFIELD, Conn. — Institutional investors generally endorse General Electric Co.'s blockbuster $10 billion stock buyback plan as a share boosting move.

But some would have liked to see a special dividend instead of or in addition to the buyback, and others worried about why GE has no need to invest in its businesses.

GE shocked the investment community Nov. 17 with its announcement of the huge, five-year buyback plan, which is to be financed mostly with cash and some borrowings.

Overall the announcement was greeted enthusiastically by Wall Street and the market. Standard & Poor's Corp. affirmed the company's ratings, saying the buyback should be accommodated easily by internal cash generation without impairing balance sheet strength. Debt to total capital is anticipated to remain moderate over the course of the share repurchase plan.

GE Chairman John Welch said the company had surveyed all the investment opportunities and "reached the conclusion that GE stock is the best investment we can make." GE also boosted the quarterly dividend 15% to 47 cents per share, which brings it to $1.88 a share on an annual basis.

Nearly half of GE's outstanding stock is held by institutions. Among the major holders are the College Retirement Equities Fund, the Teacher Retirement System of Texas, the California Public Employees' Retirement System, the Public Employees Retirement Association of Colorado, the New York State & Local Re-

Continued on page 46

Milwaukee fund under cloud

By Curtis Vosti

MILWAUKEE — The $750 million Milwaukee County Employees' Retirement System is embroiled in allegations of improper activities by its consultant, Prudential-Bache Securities Inc., and of "an absence of fundamental, ethical principles and fair play" in a contract award.

Although no discussion of the controversy arose at the Nov. 17 County Pension Board meeting, the allegations have prompted both the suspension of a $100 million stock index fund contract awarded to The Boston Co. and an investigation by the former Wisconsin securities commissioner was hired by board to look into the charges.

Former Commissioner Ulice Payne Jr. reportedly has said he is concerned that board members didn't know how the county paid Pru-Bache, and that the investigation will broaden to focus on the responsibilities of the County Pension Board's trustees and how it operates compared to industry standards.

Mr. Payne was not available for comment.

The first allegations surfaced with the Oct. 13 resignation of Board Secretary Duamel Vellon, who said he was concerned about questionable investment deals and "conflicts" between consultant Eugene Gilbert, senior vice president of Prudential-Bache in Milwaukee, and the system's money managers. (Mr. Vellon has taken a job as retirement program administrator with the City of Phoenix Employees Retirement System.)

The allegations about unfair bid and contract award policies came to light Oct. 25, when William L. Randall, executive vice president for First Bank Milwaukee, complained to the board that it changed the bid criteria for custodial and cash management services after it examined all the bids. He also charged the pension board did not inform First Bank, the original low bidder, that amended bids would be allowed.

Pension Board Chairman Arthur Saltzstein was not available for comment, and Mr. Gilbert said he was out of the country when the contract was awarded.

Mr. Vellon's allegations about Mr. Gilbert center around the soft-dollar arrangement through which Pru-Bache was paid by the

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Middle road proves best

Most accounts in fixed income outpace indexes

By Barry B. Burr

In a period when the vast majority of fixed-income portfolios beat the indexes, managers in Pensions & Investments' Performance Evaluation Report who emphasized intermediate to somewhat longer maturities and higher quality performed best in the third quarter.

First National Mercantile Bank & Trust Co., Joplin, Mo., led all 233 PIPER pooled fixed-income portfolios for both the quarter and the year.

For the quarter, First National Mercantile returned 3.92%. Following were Jefferson Trust & Savings Bank, Peoria, Ill., with 3.14%; Sanwa Bank California, Los Angeles, with 2.9%; Imperial Trust Co., Los Angeles, with 2.87%; and First NH Investment Services, Manchester, N.H., with 2.72%.

During the quarter, the Shearson Lehman Hutton Government/Corporate Bond Index returned 0.94%, while the Salomon Brothers Broad Bond Index returned 1.03%.

In the quarter, 179 portfolios beat the Shearson Lehman Hutton index, while two tied it and 52 portfolios fell short. In relation to the Salomon index, 162 portfolios beat that benchmark, while one tied it and 70 fell short. The median PIPER portfolio returned 1.24%.

At First National Mercantile, Thomas H. Atteberry, chief investment officer, attributed its portfolio's top results to a combination of timing maturities and interest rate spreads on securities.

"Since June, the market has been moving sideways," meaning interest rates have been staying relatively flat, he said. "Since we have a lot in intermediate securities, we benefited."

Its $3.5 million portfolio had an average duration of 2.75 years, about half the Shearson Lehman Hutton index's duration of 5.28 years. In maturity, it averaged 3.5 years, about a third of the index's 9.8 years.

The First National Mercantile portfolio is 70% invested in corporate securities, largely regional bank securities; 20% in Treasury or agency securities; and 10% in mortgage-backed securities.

At Jefferson Trust, John H. Hartwig, trust investment representative, said, "What really helped us was our aggressiveness."

"A lot of people thought interest rates were going to go up in June and July." From January through April, he said he and his colleagues bought longer-term securities. Since summer, "we've been buying shorter term" maturities of two to four years, as the yield curve has flattened, Mr. Hartwig added.

"We have pretty much a top-down approach, trying to get a feel where the economy and (interest) rates are going," said Mr. Hartwig, who directly oversees the portfolio after replacing Stephen C. Johnson, who left in August to join Boatmen's National Bank of St. Louis.

Mr. Johnson had played well in Peoria; for the 12 months ended Sept. 30, the $23 million Jefferson Trust portfolio returned 14.83%, ranking it seventh among the funds in PIPER and far ahead of the Shearson Lehman Hutton's 11.3% and the Salomon index's 11.21%.

"We've had a preference for quality, even though leveraged buy-outs and mergers and acquisitions have a big part of the market," Mr. Hartwig said. "We didn't feel the spread was there with corporate bonds" or even government agency securities.

Jefferson Trust holds virtually all Treasury issues of the 30 securities in its $23 million portfolio. The portfolio's maturity averages five to seven years.

At First NH Investment, William Proskow, senior vice president and senior investment officer, said: "We took an aggressive posture on a decline in interest rates in the quarter. We were fortunate in our timing . . . and picking up some of the turns in the market."

With First NH Investment's interest rate anticipation strategy, Mr. Proskow uses a top-down approach, looking particularly at the direction of the economy and Federal Reserve Board actions. "We thought the economy was slowing," leading First NH Investment to buy longer-term securities.

The portfolio, which had an average duration of six years, was composed of 65% government agency securities, predominantly mortgage-backed securities; 30% corporate bonds, rated A or AA; and 5% cash. In all, 45 securities were in the $5 million portfolio.

For the 12 months, First National Mercantile returned 18.89%. It was followed by First Variable Life Insurance Co., Little Rock, Ark., with 17.66%; Sunburst Bank, Jackson, Miss., with 16.61%; Prudential Asset Management Co., Newark, N.J., with 16.55%; and Imperial Trust with 15.71%.

In all for the 12 months, 60 portfolios beat the Shearson Lehman Hutton index, while two tied it and 161 fell short. In the same period, 66 beat the Salomon index while 167 fell short. The median PIPER portfolio for the 12 months returned 10.29%.

At Equitable Capital Management Corp., New York, Frank Scott, managing director, said of the fund's 12-month performance: "We were in a bullish posture because the economy was slowing." In other words, he said the portfolio's duration was extended to about seven years.

Equitable's portfolio returned

Continued on page 20

Fixed-income funds
(periods ended Sept. 30, 1989)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	3.92%	18.89%	13.08%	16.74%	16.36%
First quartile	1.57	11.34	8.32	13.12	11.75
Median	1.24	10.29	7.75	12.11	11.08
Third quartile	0.96	9.5	7.25	10.98	10.45
Lowest return	−1.81	5.67	3.68	4.73	7.29
SLH G/C	**0.94**	**11.3**	**7.73**	**12.82**	**11.5**

Equity funds
(periods ended Sept. 30, 1989)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	19.65%	53.54%	26.23%	29.59%	24.91%
First quartile	11.64	32.93	18.51	20.46	17.93
Median	9.71	28.9	16.64	18.82	16.83
Third quartile	7.83	24.95	14.58	17.36	15.55
Lowest return	1.87	9.83	−5.32	7.69	8.97
S&P 500	**10.73**	**32.83**	**18.64**	**20.3**	**17.35**

Shearson fund tops for quarter, year

By Terry Williams

Shearson Lehman Hutton Trust Co.'s Flexible Growth 7 equity fund had the highest return among pooled equity funds in the Pensions & Investments' Performance Evaluation Report for the third quarter, achieving a return of 19.6%.

Flexible Growth 7 also had the highest return for the year ended Sept. 30 with 53.4%.

The Standard & Poor's 500 Stock Index returned 10.73% for the quarter and 32.83% for the year. The median PIPER equity fund returned 9.71% for the quarter and 28.9% for the year.

The median funds' underperformance of the S&P 500 continued in the longer periods as well. For the five years, the median return was 18.82% compared with 20.3% for the S&P 500, and for the 10 years, the median was 16.83% vs. 17.35% for the S&P. All returns for periods of more than one year are compound annualized.

The equity fund of Sun Bank Capital Management, Orlando, Fla., led both the five- and 10-year periods with returns of 29.59% and 24.91%, respectively.

Shearson's emphasis on growth stocks paid off for the second straight quarter. In the second quarter, Flexible Growth 7 was first with a return of 16.57%.

"We're a growth stock manager, and that consistently is paying off," said Larry Tashjian, portfolio manager at Provident Investment Counsel, Pasadena, Calif., which provides investment advice to the Shearson account.

"Growth as a style has been out of favor," Mr. Tashjian said. "We haven't changed our style."

The primary reason for the portfolio's high returns is the selection of growth stocks whose earnings per share have have been between 25% and 30% over time, Mr. Tashjian said.

"These were good stocks in the second quarter and they continue to be," he said.

Besides selecting stocks of companies with strong and consistent EPS growth, Mr. Tashjian likes to see three-year sales growth, historic dividend growth and strong pre-tax earnings.

For the companies in the portfolio, these factors are present at almost twice the market average.

The fund has had a lot of success this year with **Federal National Mortgage Association** and **Student Loan Marketing Association** securities, according

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Top quartile commingled equity funds

3-month returns

	%
SLH Trust Co. (Flex growth 7)	19.7
Chancellor Capital (Styleshift)	18.7
Mark Twain Bank, Mo.	18.6
Hibernia Nat'l (A), La.	17.4
State Street Bank (Matrix syn.)	17.2
Southeast Bank, Fla.	17.2
Princeton Bank, N.J.	16.4
Chancellor Capital (Select growth)	16.3
Commercial Capital, Ark.	15.9
State Street Bank (CM02), Mass.	15.7
Lincoln Nat'l (Select), Ind.	15.5
Beverly Trust, Ill.	15.4
First Variable Life, Ark.	15.4
Harris Trust, Ill.	15.1
Harris Trust (Systematic), Ill.	15.1
First Wisconsin Asset (Growth A)	15.0
Chancellor Capital (Multifact)	14.9
Bank of Oklahoma, Tulsa	14.9
IDS Trust (A), Minn.	14.8
Riggs Nat'l Bank, D.C.	14.5
IDS Trust (Core growth), Minn.	14.5
Aetna Life, Conn.	14.3
Metropolitan Life (SA 40), N.Y.	14.2
Equitable Capital (Q-vest 18)	14.1
South Carolina Nat'l	13.9
First Kentucky Trust	13.7
Connecticut Mutual Life	13.7
Chancellor Capital (Index plus)	13.4
The New England (Growth)	13.3
Puget Sound Nat'l, Wash.	13.3
Union Nat'l Bank of Arkansas	13.2
John Hancock-IIA (1K), Mass.	13.2
Sun Bank, Fla.	13.2
Employers Life of Wausau (SA 1)	13.2
Chancellor Capital (Growth), N.Y.	13.2
Fifth Third Bank Miami, Ohio	13.1
Northern Trust (Select), Ill.	13.1
Mellon Equity Associates, Pa.	13.0
Meridian Investment, Pa.	13.0
Banc One Asset (Growth), Ohio	12.9
Manufacturers Life (C), Ontario	12.6
First City Nat'l (Port.), Texas	12.5
SLH Trust Co. (Directions 1)	12.5
NCNB Nat'l Bank, N.C.	12.4
Northern States Trust, Ill.	12.3
Continental Capital Mgmt.,Ill.	12.3
State Bank (C), Ohio	12.2
Imperial Trust Co., Calif.	12.2
Irving Trust, N.Y.	12.2
Hamilton Bank, Pa.	12.2
Associated Kellogg, Wis.	12.2
Deposit Guaranty Nat'l, Miss.	12.1
Pacific Mutual, Calif.	12.0
Associated Manitowoc, Wis.	12.0
Comerica, Mich.	11.9
Mutual of New York (Growth)	11.9
Bank One Wisconsin (Growth)	11.9
Manufacturers Detroit	11.9
American Nat'l (Growth), Ind.	11.8
Assoc. Bank Neenah, Wis.	11.8
Bank of Delaware (VIP)	11.7
Barnett Banks Trust , Fla.	11.6
Central Fidelity, Va.	11.6
John Hancock-IIA (1L), Mass.	11.6
Equitable Capital (No. 4)	11.6
Wilmington Trust-Tremont (Total)	11.6
S&P 500	**10.7**

1-year returns

	%
SLH Trust Co. (Flex growth 7)	53.5
Mark Twain Bank, Mo.	47.2
State Street Bank (Matrix syn.)	45.2
Lincoln Nat'l (Select), Ind.	44.4
State Street Bank (CM02), Mass.	42.2
Equitable Capital (No. 4)	41.8
Chancellor Capital (Styleshift)	41.8
Princeton Bank, N.J.	41.1
Hibernia Nat'l (A), La.	40.5
Connecticut Mutual	40.3
Chancellor Capital (Select growth)	40.3
Irving Trust, N.Y.	40.2
IDS Trust (Core growth), Minn.	39.9
Chase-CMB (Spectrum), N.Y.	39.5
NCNB Nat'l Bank, N.C.	39.3
Metropolitan Life (SA 40), N.Y.	38.8
John Hancock-IIA (1K), Mass.	38.3
Firstier Bank Omaha, Neb.	38.2
Chancellor Capital (Growth), N.Y.	37.8
Hibernia Nat'l (G), La.	37.7
Equitable Capital (No. 1)	37.6
Meridian Investment, Pa.	37.6
First Wisconsin Asset (Growth A)	37.6
Bank One Wisconsin (Growth)	37.4
Chancellor Capital (Index plus)	36.8
Chancellor Capital (Multifact)	36.6
First Variable Life, Ark.	36.3
John Hancock-IIA (1L), Mass.	36.2
Commercial Capital (Spec.), Ark.	36.2
Associated Manitowoc, Wis.	36.1
Deposit Guaranty Nat'l, Miss.	36.0
Assoc. Bank Neenah, Wis.	35.8
Aetna Life, Conn.	35.6
IDS Trust (A), Minn.	35.4
Southeast Bank, Fla.	35.3
Mercantile Bank, Mo.	35,3
Second Nat'l Bank, Ohio	35.2
Banc One Asset (Growth), Ohio	35.2
Sun Bank, Fla.	35.1
Continental Capital, Ill.	34.7
Equitable Capital (Q-vest 18)	34.6
American Nat'l Chicago (Active)	34.5
Puget Sound Nat'l, Wash.	34.5
Chase-CMB (Stock and fut. index)	34.2
First City Nat'l (Port.), Texas	34.2
Bank of Oklahoma, Tulsa	34.1
Markston Investment, N.Y.	33.9
Chancellor Capital (Enhance ind.)	33.8
Harris Trust, Ill.	33.7
Harris Trust (Systematic), Ill.	33.7
Johnson County Bank, Kan.	33.6
U.S. Nat'l Bank, Texas	33.5
MTrust, (Growth), Texas	33.3
First Nat'l Mer. Joplin (E), Mo.	33.3
Bank One Wisconsin (Disciplined)	33.2
New York Life (SA 6)	33.2
Hamilton Bank, Pa.	33.2
Northern Trust, (Select), Ill.	33.2
Pioneer Bank, Ill.	33.1
First Nat'l Bank/Amarillo, Texas	33.0
State Street Bank (Index), Mass.	32.9
Wells Fargo (Index), Calif.	32.9
Crestar Bank, (Roanoke), Va.	32.9
First Kentucky Trust	32.9
Bankers Trust Co. (Index), N.Y.	32.9
S&P 500	**32.8**

5-year returns

	%
Sun Bank, Fla.	29.6
Bank One, Indianapolis (L)	27.0
State Bank (C), Ohio	26.4
State Street Bank (Matrix syn.)	25.6
SLH Trust Co. (Flex growth 7)	24.1
Chancellor Capital (Select growth)	24.0
IDS Trust (Core growth), Minn.	23.4
Pioneer Bank, Ill.	23.2
Bank One Wisconsin (Disciplined)	23.2
Firstier Bank Omaha, Neb.	23.0
State Street Bank (CM02), Mass.	22.9
Assoc. Bank Neenah, Wis.	22.7
Harris Trust (Systematic), Ill.	22.7
NCNB Texas (Diverse)	22.2
Chancellor Capital (Multifact)	22.1
Merus Capital (Income), Calif.	22.0
IDS Trust (A), Minn.	21.9
U.S. Nat'l Bank, Texas	21.8
First Fidelity (Discretionary), N.J.	21.8
Crown Life (U.S. group), Ontario	21.7
Meridian Investment, Pa.	21.7
John Hancock-IIA (1K), Mass.	21.4
United Capital Mgmt., Colo.	21.4
Chancellor Capital (Index plus)	21.3
Equitable Capital (No. 4)	21.3
First Fidelity Bank, N.J.	21.3
Harris Trust (Low p/e), Ill.	21.3
American Nat'l Chicago (Active)	21.2
Barnett Banks Trust, Fla.	21.2
Chase-CMB (Stock & fut. index)	21.1
Irving Trust, N.Y.	21.1
Associated Manitowoc, Wis.	21.1
NCNB Nat'l Bank, N.C.	21.0
Puget Sound Nat'l, Wash.	21.0
Guardian Insurance (VA 1), N.Y.	21.0
Summit Trust Co., N.J.	21.0
NCNB Texas (Income)	20.9
Mellon Equity Associates, Pa.	20.9
Wellington Trust (Divers. growth)	20.8
Harris Trust, Ill.	20.8
College Ret. Equity Fund, N.Y.	20.7
First NH Investment (A)	20.7

Top equity funds by size

1-year returns

Over $100 million

	%
Equitable Capital (No. 4), N.Y.	41.8
NCNB Nat'l Bank, N.C.	39.3
Metropolitan Life (SA 40), N.Y.	38.8
John Hancock-IIA (1K), Mass.	38.3
Chancellor Capital (Growth)	37.8
Equitable Capital (No. 1), N.Y.	37.6
Meridian Investment, Pa.	37.6
First Wisconsin (Growth A)	37.6
Chancellor Capital (Multifact)	36.6
John Hancock-IIA (1L), Mass.	36.2

$50 million to $100 million

	%
State Street Bank (Matrix syn.)	45.2
Lincoln Nat'l (Select), Ind.	44.4
Chancellor Capital (Styleshift)	41.8
Hibernia Nat'l (A), La.	40.5
Chase-CMB (Spectrum), N.Y.	39.5
Chancellor Capital (Index plus)	36.8
Deposit Guaranty Nat'l, Miss.	36.0
U.S. Nat'l Bank, Texas	33.5
First Fidelity Bank, N.J.	31.9
General American (Index), Mo.	31.6

$10 million to $50 million

	%
State Street Bank (CM02)	42.2
Princeton Bank, N.J.	41.1
Connecticut Mutual Life	40.3
Chancellor (Select growth)	40.3
Irving Trust, N.Y.	40.2
Firstier Bank Omaha, Neb.	38.2
Hibernia Nat'l (G), La.	37.7
Bank One Wisconsin (Growth)	37.4
First Variable Life, Ark.	36.3
Assoc. Bank Neenah, Wis.	35.8

Under $10 million

	%
SLH Trust (Flex growth 7)	53.5
IDS Trust (Core growth), Minn.	39.9
Commercial Capital, Ark.	36.2
Associated Manitowoc, Wis.	36.1
Second Nat'l Bank, Ohio	35.2
Puget Sound Nat'l, Wash.	34.5
Johnson County Bank, Kan.	33.6
First Nat'l Mer. Joplin (E), Mo.	33.3
Pioneer Bank, Ill.	33.1
Wellington Trust (Growth)	32.8

10-year returns

Over $100 million

	%
Sun Bank, Fla.	24.9
Manufacturers Life, Ontario	22.9
First Union Nat'l Bank, N.C.	20.4
Merus Capital, Calif.	20.0
Equitable Capital (No. 4), N.Y.	19.8
The New England (Growth)	19.7
Union Labor Life (SA A), D.C.	19.5
MTrust (Growth), Texas	19.4
Manufacturers Detroit	19.4
Markston Investment, N.Y.	19.0

$50 million to $100 million

	%
U.S. Nat'l Bank, Texas	20.0
MTrust (Value), Texas	19.5
Merus Capital (Growth plus)	18.8
First Fidelity Bank, N.J.	18.5
Chase-CMB (Spectrum), N.Y.	17.9
Chancellor Capital (Index plus)	17.4
Mercantile Safe, Md.	17.4
The Phoenix, Conn.	17.4
First Wisconsin Trust (Income)	17.4
Texas Commerce (Growth)	17.3

$10 million to $50 million

	%
First Fidelity (Discret.)	21.2
United Capital Mgmt., Colo.	20.2
State Street Bank (CM02)	19.9
First Interstate of Oklahoma	19.5
Connecticut Mutual Life	19.2
First Trust Corp., Colo.	18.7
Confederation Life, Ga.	18.6
First Interstate Oregon	18.5
Firstier Bank Omaha, Neb.	18.5
Lake Shore Nat'l, Ill.	18.5

Under $10 million

	%
First NH Investment (A)	20.2
Associated Manitowoc, Wis.	17.4
Puget Sound Nat'l, Wash.	17.2
Second Nat'l Bank, Ohio	17.2
Union Central, Ohio	16.6
First Nat'l of Commerce, La.	15.8
Great West (VA AA), Manitoba	15.6
Planters Nat'l (Growth), N.C.	15.4
First Nat'l Bartlesville, Okla.	15.0
American Nat'l (Growth), Ind.	14.9

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Markston Investment, N.Y.	20.7
SLH Trust Co. (Value 4)	20.7
Sunburst Bank, Miss.	20.6
MTrust (Growth) Texas	20.6
Bankers Trust Co. (Index), N.Y.	20.6
MTrust (Value), Texas	20.5
First Trust Corp., Colo.	20.5
Cullen Bank, Texas	20.5
S&P 500	**20.3**

10-year returns

	%
Sun Bank, Fla.	24.9
Manufacturers Life, Ontario	22.9
First Fidelity (Discretionary), N.J.	21.2
First Union Nat'l Bank, N.C.	20.4
United Capital Mgmt., Colo.	20.2
Guardian Insurance (VA 1), N.Y.	20.2
First NH Investment (A)	20.2
U.S. Nat'l Bank, Texas	20.0
Merus Capital (Income), Calif.	20.0
State Street Bank (CM02), Mass.	19.9
Equitable Capital (No. 4)	19.8
The New England (Growth)	19.7
First Interstate of Oklahoma	19.5
MTrust (Value), Texas	19.5
Union Labor Life (SA A), D.C.	19.5
MTrust (Growth), Texas	19.4
Manufacturers Detroit	19.4
Connecticut Mutual Life	19.2
Markston Investment, N.Y.	19.0
Merus Capital (Gro./strat.), Calif.	18.8
First Trust Corp., Colo.	18.7
Confederation Life, Ga.	18.6
NCNB Texas (Diverse)	18.6
First Interstate Oregon	18.5
Firstier Bank Omaha, Neb.	18.5
Lake Shore Nat'l, Ill.	18.5
American Nat'l Chicago (Active)	18.5
First Fidelity Bank, N.J.	18.5
Dauphin Deposit (Corp.), Pa.	18.4
Irving Trust, N.Y.	18.3
ALIAC (Variable/tot.)	18.3
First Nat'l of Omaha (D), Neb.	18.2
John Hancock-IIA (1K), Mass.	18.1
Massachusetts Mutual	18.1
C&S Trust Florida	18.1
Employers Life/Wausau (SA 1)	18.0
Aetna Life, Conn.	18.0
Dominion Trust (Corp.), Va.	17.9
Chase-CMB (Spectrum), N.Y.	17.9
Meridian Investment, Pa.	17.9
Colorado Nat'l Bank	17.9
S&P 500	**17.4**

Top quartile commingled fixed-income funds

3-month returns

	%
First Nat'l Mer. Joplin, Mo.	3.9
Jefferson Trust, Ill.	3.1
Sanwa Bank (C), Calif.	2.9
Imperial Trust, Calif.	2.9
First NH Investment (B)	2.7
Mutual of New York (Priv. place)	2.7
Security Nat'l Bank (II), W. Va.	2.7
American Nat'l, Ind.	2.6
Chancellor Capital (Mtg.), N.Y.	2.5
Delaware Trust	2.5
American Nat'l Chicago (Inter.)	2.5
Beverly Trust, Ill.	2.4
Sunburst Bank, Miss.	2.4
State Bank (D), Ohio	2.4
Chancellor Capital (Inter.), N.Y.	2.4
Dominion Trust (Stable cap.), Va.	2.3
American Nat'l (Income), Ind.	2.3
Second Nat'l Bank, Ohio	2.3
Chancellor Capital (Short), N.Y.	2.3
SW Nat'l Bank of Pennsylvania	2.2
Hawaiian Trust (Defensive)	2.2
Dauphin Deposit (Short), Pa.	2.2
Penn Mutual (SA C), Pa.	2.2
Bankers Trust (Gov. & agen.), N.Y.	2.2
Bank of the West, Calif.	2.2
Central Fidelity (Capital pres.), Va.	2.2
Bankers Trust (B), N.Y.	2.2
Signet Trust (Stable value), Va.	2.2
Commerce Bank (GIC), Mo.	2.1
First Nat'l Bank/Amarillo (Inter.)	2.1
MTrust, Texas	2.1
First Nat'l Bank/Amarillo, Texas	2.1
Southeast Bank, Fla.	2.1
Aetna Life (Shares/tot), Conn.	2.1
First Interstate of Wisconsin	2.0
United Capital Mgmt., Colo.	2.0
Mercantile Safe (Inter.), Md.	1.9
Gary Wheaton Bank, Ill.	1.9
First Alabama Bank	1.9
Commerce Bank, Mo.	1.9
Bank One Wisconsin Trust (Inter.)	1.9
Security Nat'l Bank, W. Va.	1.9
Central Fidelity (Short), Va.	1.9
NCNB Texas (Low vol.)	1.9
Connecticut Nat'l Bank	1.8
First Nat'l of Toledo, Ohio	1.8
Connecticut Nat'l Bank (Inter.)	1.8
Meridian Investment, Pa.	1.8
First Nat'l Mercantile (B), Mo.	1.7
Texas American Bank	1.7
SLH Trust Co. (Directions 5)	1.7
Chase-CMB (Short-inter.), N.Y.	1.7
Associated Kellogg, Wis.	1.6
Michigan Nat'l	1.6
Riggs Nat'l Bank, D.C.	1.6
Lake Shore Nat'l, Ill.	1.6
Greeley Nat'l, Colo.	1.6
Cullen Bank, Texas	1.6
Oregon Bank	1.6
First Nat'l of Omaha (C), Neb.	1.6
SLH G/C	**0.9**

1-year returns

	%
First Nat'l Mer. Joplin, Mo.	18.9
First Variable Life, Ark.	17.7
Sunburst Bank, Miss.	16.6
Prudential Rg./Asset (Long), N.J.	16.6
Imperial Trust, Calif.	15.7
Equitable Capital (No. 5)	15.0
Jefferson Trust, Ill.	14.8
Irving Trust, N.Y.	14.7
Delaware Trust	14.3
Chase-CMB (Long), N.Y.	13.7
NCNB Texas (Long)	13.6
Third Nat'l Bank, Tenn.	13.4
First Variable Life (HQ), Ark.	13.4
First Nat'l Bank/Amarillo, Texas	13.1
Trust Services of America, Calif.	12.7
General American (SA 9), Mo.	12.5
Bank of Delaware	12.4
Chase-CMB (Index), N.Y.	12.2
CIGNA Corp. (Active), Conn.	12.2
Cullen Bank, Texas	12.2
CoreStates Investment, Pa.	12.1
Beverly Trust, Ill.	12.1
Mellon Bond, Pa.	12.1
Second Nat'l Bank, Ohio	12.0
Harris Trust, Ill.	12.0
First Union Nat'l Bank (1), N.C.	12.0
LaSalle Nat'l (Long), Ill.	11.9
Bankers Trust (SLGC index), N.Y.	11.9
First Wachovia, N.C.	11.9
Pacific Mutual, Calif.	11.8
First Kentucky Trust	11.8
First Nat'l of Omaha (C), Neb.	11.7
First Wisconsin Trust (Index)	11.7
Lincoln Nat'l (Corp), Ind.	11.7
Prudential Rg./Asset (Privest)	11.6
Bank of New England, Mass.	11.6
First Asset Mgmt, Minn.	11.6
Barnett Banks, Fla.	11.6
Texas Commerce (Active)	11.6
Colorado Nat'l Bank	11.6
Marine Midland, N.Y.	11.5
Johnson County Bank, Kan.	11.5
Fidelity Bank, Pa.	11.5
Society Nat'l, Ohio	11.5
John Hancock-IIA, Mass.	11.5
Prudential Rg./Asset (BMI), N.J.	11.5
First Asset Mgmt. (II), Minn.	11.5
The Principal, Iowa	11.5
Liberty Nat'l, Ky.	11.5
Manufacturers Life (B), Ontario	11.4
SLH Trust Co. (Directions 5)	11.4
Chancellor Capital (Inter.), N.Y.	11.4
Riggs Nat'l Bank, D.C.	11.4
Comerica, Mich.	11.4
Connecticut Nat'l Bank (Inter.)	11.4
Midlantic, N.J.	11.4
Travelers Cos. (Index), Conn.	11.4
Wells Fargo (Index), Calif.	11.3
Connecticut Nat'l Bank	11.3
Chemical Bank (Bondex I), N.Y.	11.3
Sun Bank, Fla.	11.3
Firstier Bank Omaha, Neb.	11.3
SLH G/C	**11.3**
Wellington Trust (Enhanced)	11.3

5-year returns

	%
Delaware Trust	16.7
First Variable Life, Ark.	16.7
United Capital Mgmt., Colo.	16.7
Equitable Capital (No. 5)	16.4
Sunburst Bank, Miss.	16.3
Beverly Trust, Ill.	15.3
Connecticut Nat'l Bank	14.9
Trust Services of America, Calif.	14.8
The Principal, Iowa	14.7
LaSalle Nat'l (Long), Ill.	14.6
IAA Trust (B), Ill.	14.4
Travelers Cos. (SA P), Conn.	14.3
General American (SA 9), Mo.	14.2
Life of Virginia	14.1
John Hancock-IIA, Mass.	14.1
Society Nat'l, Ohio	14.1
NCNB Texas (Long)	14.1
Bankers Trust (Mtg. pass), N.Y.	14.1
First Interstate of Arizona	14.1
American Security, D.C.	14.0
Colorado Nat'l Bank	14.0
Crestar Bank (Roanoke), Va.	13.9
First Kentucky Trust	13.9
Sanwa Bank (C), Calif.	13.9
First Variable Life (HQ), Ark.	13.9
Aetna Life (Shares/tot), Conn.	13.8
Pacific Mutual, Calif.	13.8
Harris Trust, Ill.	13.8
First Wachovia, N.C.	13.8
Connecticut Nat'l Bank (Inter.)	13.7
Sovran Capital Mgmt. (Inst.), Va.	13.7
Metropolitan Life (SA 41), N.Y.	13.7
Manufacturers Life (B), Ontario	13.7
First Nat'l Mercantile (B), Mo.	13.5
Prudential Rg./Asset (Privest)	13.5
Johnson County Bank, Kan.	13.5
IDS Trust (A), Minn.	13.4
Bankers Trust (A), N.Y.	13.4
Comerica, Mich.	13.4
Mellon Bond, Pa.	13.4
CoreStates Investment, Pa.	13.4
Fidelity Bank, Pa.	13.3
Northern Trust, Ill.	13.3
Aetna Life (SA 76), Conn.	13.3
Bank of New England, Mass.	13.2
Merus Capital (Flexible), Calif.	13.2
Liberty Nat'l, Ky.	13.2
Marine Midland, N.Y.	13.2
Wellington Trust (Emerg.), Mass.	13.2
CIGNA Corp. (Active), Conn.	13.1
Wellington Trust (Enhanced)	13.1
First Nat'l of Omaha (C), Neb.	13.1
Chancellor Capital, N.Y.	13.1
SLH G/C	**12.8**

10-year returns

	%
First Variable Life, Ark.	16.4
Beverly Trust, Ill.	13.9
United Capital Mgmt., Colo.	13.7
Sovran Capital Mgmt (Inst.), Va.	13.6
Pacific Mutual, Calif.	13.0

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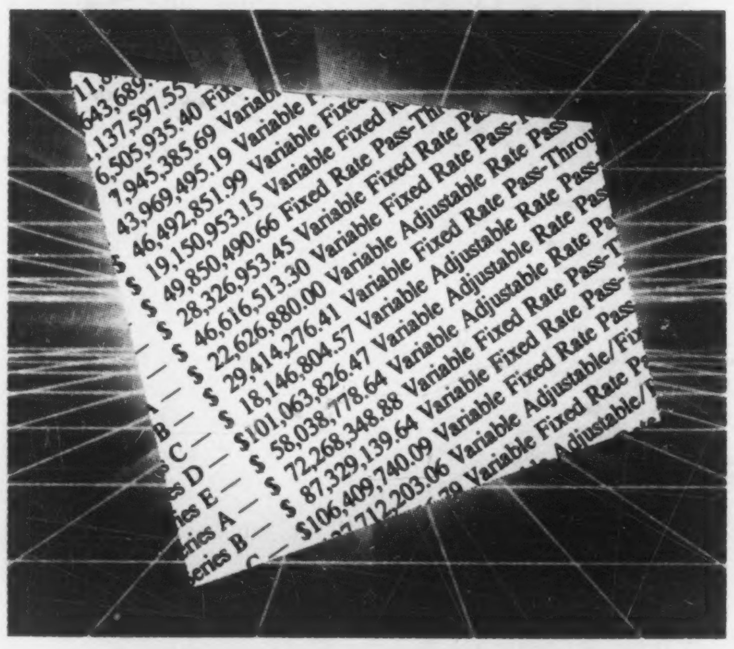

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American Security, D.C.	12.9
First Kentucky Trust	12.9
Life of Virginia	12.8
Sanwa Bank (C), Calif.	12.6
Texas Commerce (Active)	12.6
Bankers Trust (Mtg. pass), N.Y.	12.5
Fidelity Bank, Pa.	12.5
IAA Trust (B), Ill.	12.4
Connecticut Nat'l Bank	12.4
Second Nat'l Bank, Ohio	12.3
Cullen Bank, Texas	12.3
First Interstate of Arizona	12.2
Central Fidelity, Va.	12.1
Bank of New England, Mass.	12.1
Aetna Life (Shares/tot), Conn.	12.1
Trust Services of America, Calif.	12.1
John Hancock-IIA, Mass.	12.0
Nat'l Westminster Bank, N.J.	12.0
Jefferson Trust, Ill.	12.0
Mississippi Valley Advisors, Mo.	12.0
Mercantile Bank, Mo.	12.0
Society Nat'l, Ohio	11.9
First Nat'l of Maryland	11.9
Crestar Bank (Roanoke), Va.	11.9
Bankers Trust (A), N.Y.	11.9
American Nat'l Chicago (Inter)	11.9
Hibernia Nat'l, La.	11.9
Manufacturers Detroit	11.9
First Wachovia, N.C.	11.8
CIGNA Corp. (Inter.), Conn.	11.8
Key Trust Co., N.Y.	11.8
CIGNA Corp. (Active), Conn.	11.8
Trustcorp Bank, Ohio	11.8
SLH G/C	**11.5**

Top two deciles Piper Plus equity funds

3-month returns

	%
Provident Invst. Counsel (Stellar)	24.1
Janus Capital	24.1
Intelligent Invst. (Val. rotator)	22.9
Cheswick Invst.	20.7
IDS Advisory (Emerg. growth)	19.0
Hutson Mgmt. (Growth)	18.7
Provident Invst. Counsel	18.1
Capital Growth Mgmt.	17.9
Sirach/Flinn, Elvins	17.3
Investors Research (Growth)	16.9
William D. Witter	16.6
Nicholas-Applegate (Growth)	16.4
Pennsylvania Invst. (Dynamic)	16.0
Fred Alger Mgmt.	15.7
Jundt/Capen (Large cap.)	15.7
Lynch & Mayer (Growth)	15.7
General American (Closed-end)	15.5
Abel Noser	15.5
IDS Advisory	15.2
Pacific Century Advisers (Growth)	15.1
Lincoln Capital Mgmt.	15.0
Crescent (Enhanced index)	14.8
Value Line (VLAM/standard)	14.8
J & W Seligman (Growth)	14.8
Investors Research (Select)	14.7
IDS Advisory (Large cap. growth)	14.5
Frontier Capital (Trad. growth)	14.2
Aetna Capital Mgmt.	14.2
Hellman, Jordan	13.9
Wilke Capital (Core growth)	13.8
Putnam Cos.	13.4
Peregrine (Agg./small cap.)	13.0
Chase Investors (Sm. cap. value)	12.8
Leylegian Invst.	12.8
RCM Capital Mgmt.	12.7
Cadence Capital (Core)	12.7
Miller, Anderson & Sherrerd	12.7
Harbor Capital	12.7
S&P 500	**10.7**

1-year returns

	%
Cheswick Invst.	63.1
Janus Capital	62.8
Provident Invst. Counsel (Stellar)	56.6
Investors Research (Growth)	53.7
Provident Invst. Counsel	50.0
Intelligent Invst. (Val. rotator)	48.9
J.M. Hartwell	47.3
Frontier Capital (Energy)	47.0
MIDCO (Sm. cap. growth)	45.8
Tukman Capital (Active)	43.9
Pacific Century (Growth)	43.8
Lynch & Mayer (Growth)	43.1
PRIFORM Invst. (Value)	43.0
Lehman Ark Mgmt. (Spec. sit.)	42.5
Chase Investors (Small cap.)	41.3
Mass. Financial (Low vol.)	41.3
Peregrine (Agg./small cap.)	41.1
Sirach/Flinn, Elvins	41.1
Pennsylvania Invst. (Dynamic)	41.1
Hutson Mgmt. (Growth)	40.8

Top fixed funds by size

1-year returns

Over $100 million

	%
Equitable Capital (No. 5), N.Y.	15.0
Chase-CMB (Long-term)	13.7
CIGNA Corp. (Active), Conn.	12.2
Mellon Bond, Pa.	12.1
Harris Trust, Ill.	12.0
First Union Nat'l Bank (1), N.C.	12.0
First Wachovia, N.C.	11.9
Pacific Mutual, Calif.	11.8
First Kentucky Trust	11.8
First Wisconsin Trust	11.7

$50 million to $100 million

	%
Prudential Rg/Asset (Long)	16.6
Trust Services/America, Calif.	12.7
CoreStates, Pa.	12.1
Barnett Banks, Fla.	11.6
Texas Commerce (Active)	11.6
Marine Midland, N.Y.	11.5
Fidelity Bank, Pa.	11.5
Liberty Nat'l, Ky.	11.5
Chancellor Capital (Inter.)	11.4
Midlantic, N.J.	11.4

$10 million to $50 million

	%
Jefferson Trust, Ill.	14.8
Irving Trust, N.Y.	14.7
Delaware Trust	14.3
NCNB Texas (Long)	13.6
Third Nat'l Bank, Tenn.	13.4
First Nat'l Bank/Amarillo	13.1
General American (SA 9), Mo.	12.5
Bank of Delaware	12.4
Chase-CMB (Index), N.Y.	12.2
Cullen Bank, Texas	12.2

Under $10 million

	%
First Nat'l Mer. Joplin, Mo.	18.9
First Variable Life, Ark.	17.7
Sunburst Bank, Miss.	16.6
Imperial Trust, Calif.	15.7
First Variable Life (HQ), Ark.	13.4
Second Nat'l Bank, Ohio	12.0
LaSalle Nat'l (Long), Ill.	11.9
Connecticut Nat'l Bank	11.3
IDS Trust (A), Minn.	11.0
Bank One, Indianapolis	10.9

10-year returns

Over $100 million

	%
Sovran Capital, Va.	13.6
Pacific Mutual, Calif.	13.0
American Security, D.C.	12.9
First Kentucky Trust	12.9
Bankers Trust (Mtg. pass)	12.5
Bank of New England, Mass.	12.1
Aetna Life (Shares/tots)	12.1
John Hancock-IIA, Mass.	12.0
Mercantile Bank, Mo.	12.0
Manufacturers Detroit	11.9

$50 million to $100 million

	%
Life of Virginia	12.8
Texas Commerce (Active)	12.6
Fidelity Bank, Pa.	12.5
Trust Services/America, Calif.	12.1
Bankers Trust (A), N.Y.	11.9
Hibernia Nat'l, La.	11.9
Bankers Trust (B), N.Y.	11.7
Chancellor Capital (Inter.)	11.4
Massachusetts Mutual	11.4
CoreStates, Pa.	11.4

$10 million to $50 million

	%
Beverly Trust, Ill.	13.9
Sanwa Bank (C),Calif.	12.6
IAA Trust (B), Ill.	12.4
Cullen Bank, Texas	12.3
First Interstate of Arizona	12.2
Central Fidelity, Va.	12.1
Jefferson Trust, Ill.	12.0
Society Nat'l, Ohio	11.9
First Nat'l of Maryland	11.9
Key Trust, N.Y.	11.8

Under $10 million

	%
First Variable Life, Ark.	16.4
Connecticut Nat'l Bank	12.4
Second Nat'l Bank, Ohio	12.3
Crestar Bank (Roanoke), Va.	11.9
Oregon Bank	11.3
Sunburst Bank, Miss.	10.9
Assoc. Manitowoc (High inc.)	10.8
Valley Nat'l (II), Ariz.	10.8
First Trust Corp., Colo.	10.6
First NH Investment (B)	10.6

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J & W Seligman (Growth)	40.3
IDS Advisory (Large cap. growth)	39.9
Cramer Rosenthal McGlynn (Val.)	39.9
Fred Alger Mgmt.	39.7
Hellman, Jordan	39.4
Value Line (VLAM/stand.)	39.3
Scudder Stevens & Clark (Gr/inc.)	39.2
Investors Research (Select)	38.4
Chase Invst. Counsel	38.2
Crescent (Enhanced index)	38.0
Balch, Hardy & Scheinman	37.7
Investment Counselors	37.3
Markston Invst. (Corp.)	37.2
Furman Selz Capital	37.2
J.P. Morgan Invst. (Research)	37.1
Aetna Capital Mgmt.	36.1
IDS Advisory (Emerg. growth)	36.0
S&P 500	**32.8**

5-year returns

	%
Intelligent Invst. (Val. rotator)	37.5
NFJ Invst. Group (Select)	37.0
C.H. Brown (Computer)	33.2
Wilshire Asset (Lg. co. growth)	32.0
Crescent (Enhanced index)	31.1
J.M. Hartwell	28.2
Pennsylvania Invst. (Dynamic)	28.0
Advanced Quantitative (Neglect)	27.5
Cheswick Invst.	26.7
Cadence Capital (Core)	26.1
Tukman Capital (Active)	24.9
Leylegian Invst.	24.9
GAMCO Investors	24.9
Waddell & Reed (Core)	24.8
Capital Growth Mgmt.	24.7
Trevor Stewart Burton Jacobsen	24.7
Scudder Stevens & Clark (Gr/inc.)	24.5
Institutional Capital	24.2
John A. Levin (Cap. weighted)	23.9
Investors Research (Growth)	23.6
Steven J. Margaretic	23.6
Philadelphia Invst.	23.5
IDS Advisory (Large cap. growth)	23.4
Equinox Capital Mgmt. (U.S.)	23.3
Lehman Ark Mgmt. (Spec. sit.)	23.3
Caldwell & Orkin	23.3
J.P. Morgan Invst. (Research)	23.1
Hutson Mgmt. (Growth)	23.0
Mitchell Hutchins (Select)	23.0
Sirach/Flinn, Elvins	22.8
Securities Research (Dreyfus)	22.7
PRIMECAP Mgmt.	22.6
Lynch & Mayer (Growth)	22.4
S&P 500	**20.3**

Top two deciles Piper Plus fixed-income funds

3-month returns

	%
Trust Co./West (Convert. GW)	7.5
Calamos Asset (Convert.)	7.2
Trust Co./West (Convert.)	6.2
Froley Revy (Conv. only A/C)	5.3
Gateway Invst. (Inc. plus)	3.8
Philadelphia Invst.	3.5
Gateway Invst. (Dividend)	2.6
Chemical Invst. (Money mkt.)	2.4
Gabelli O'Connor (Act. cash)	2.4
McKee Invst.	2.3
Hoisington Invst.	2.3
DFA (Inflation hedge)	2.2
Huff Asset Mgmt.	2.1
Discount Corp. of N.Y. (Cash)	2.1
VCS&O Asset	2.0
PRIMA (PRIMA V)	1.9
PRIMA (PRIMA III)	1.9
Gardner & Preston Moss (Short)	1.8
Investment Counselors	1.8
Morison Asset (Reserve asset)	1.8
EMG Advisors (Var. rate)	1.8
PRIMA (PRIMA X)	1.8
SLH G/C	**0.9**

1-year returns

	%
Trust Co./West (Convert. GW)	22.4
Trust Co./West (Convert.)	20.2
Calamos Asset (Convert.)	18.7
Trevor Stewart Burton Jacobsen	18.2
Bridgewater Asset (Mkt. timing)	16.8
STW Fixed Income (Long comp.)	15.9
Peters, Gamm & West	15.2
Froley Revy (Conv. only A/C)	15.1
Huff Asset Mgmt.	14.9
McKee Invst.	14.6
Gateway Invst. (Inc. plus)	13.6
Red Oak Advisers (Protective)	13.6
Denver Invst. (Long term)	13.4
J & W Seligman	12.9
Investment Counselors	12.1
PIMCO (Total return)	12.1
Western Asset (Long term)	12.0
Standish, Ayer & Wood (Core)	12.0
Standish, Ayer & Wood (S.A. free)	12.0
Wright Investor's Service	11.9
IDS Advisory	11.7
SLH G/C	**11.3**

5-year returns

	%
Bridgewater Asset (Mkt. timing)	19.3
McKee Invst.	18.1
STW Fixed Income (Long comp.)	17.8
Huff Asset Mgmt.	17.2
Trevor Stewart Burton Jacobsen	16.7
Trust Co./West (Convert. GW)	16.7
Hoisington Invst.	16.7
Trust Co./West (Convert.)	16.6
Denver Invst. (Long term)	16.1
Red Oak Advisers (Protective)	15.3
Trust Co./West (High yield)	15.1
Froley Revy (Conv. only A/C)	15.1
Calamos Asset (Convert.)	14.9
PRIMA (PRIMA X)	14.8
Peters, Gamm & West	14.6
Caywood Christian (High yield)	14.6
Wright Investor's Service	14.6
Western Asset Mgmt. (Long term)	14.6
SLH G/C	**12.8**

Middle road

Continued from page 15

14.96% for the 12 months, ranking it sixth among all PIPER funds and first among those larger than $100 million.

For the quarter, Equitable returned 0.29%, placing it in the last decile.

At Chase Investors Management Corp., Dan C. Roberts, managing director-fixed income, said, "We extended duration significantly in April and caught the market rally." It moved its average duration two years, mostly done in April, to 8.2 years, about double the Shearson Lehman Hutton index's average.

Chase's $200 million portfolio returned 13.71% for the 12 months, ranking it second among portfolios of more than $100 million and 10th among all portfolios. Mr. Roberts attributed most of the 12-month performance to the moves in April. In the third quarter, it returned 0.63%, ranking it in the ninth decile.

Chicago-based Harris Trust & Savings Bank's $280 million portfolio returned 11.99% for the 12 months, ranking it fifth among portfolios of more than $100 million and 25th among all portfolios. For the quarter, Harris returned 1.17%, ranking in the sixth decile. The fund's average maturity was about 10 years, compared with a Shearson Lehman Hutton index maturity of 9.8 years. ■

Shearson fund tops

Continued from page 15

to Mr. Tashjian. "We had some help earlier this year with cellular telephone stocks," he said.

Other stocks that have performed well are **Walt Disney Co.**, **Warner Communications Inc.** and **Browning-Ferris Industries Inc.**

Chancellor Capital Management's Styleshift fund was second for the quarter, achieving a return of 18.69%.

Styleshift is a quantitative fund that uses fact-based models to forecast whether aggressive or defensive stocks will be in favor during the next three to six months, according to Eric Remole, vice president with New York-based Chancellor.

The model examines inflation pressures and the market outlook and determines if aggressive or defensive stocks are overpriced or underpriced relative to the market. Once the model determines which type of stock will do well, it then selects the best stocks within that type, according to Mr. Remole.

If neither defensive nor aggressive stocks are in favor, the model makes a selection based on earnings and price momentum.

During the third quarter, the portfolio's style was neutral to defensive and is now neutral, so in essence all the weight is on the momentum factor.

"It's not making a big bet on aggressive stocks or on defensive stocks," Mr. Remole said. "It's basically looking at stocks that have good momentum."

Stocks that performed well in the $60 million Styleshift fund during the quarter include **Fannie Mae**, **MCI Communications Corp.** and **Walt Disney Co.**, according to Mr. Remole.

Mark Twain Trust Division's $7.7 million stock fund finished third and second, respectively, for the quarter and year ended Sept. 30.

Carl Enloe, senior vice president with Mark Twain Trust Division, St. Louis, said stocks for the fund are selected based on earnings and revenue growth and value comparisons that take into account the price-to-earnings, price-to-sale and price-to-book ratios.

"We're looking for common stocks that are showing above average earnings growth well within the historic value guidelines we look at," Mr. Enloe said. "Most times, it leads us to high-cap stocks, but from time to time, cyclicals come in.

"We don't go into the small caps or those judged to be risky."

The fund has large positions in **Philip Morris Cos. Inc.**, **Loews Corp.**, **Fannie Mae**, **BankAmerica Corp.** and **American International Group Inc.**

The equity fund of Sun Bank Capital also was a repeat top performer. The fund achieved the highest returns in the PIPER universe during the five- and 10-year periods ended Sept. 30 and June 30.

Boston-based State Street Bank and Trust Co.'s Matrix Synthesis fund finished third for the year ending Sept. 30, achieving a return of 45.22%.

According to John C. Bogle Jr., vice president of asset management, stocks that are selected for the fund exhibit outstanding relative value based on two quantitative measures.

Mr. Bogle buys stocks that sell far below intrinsic value or those whose intrinsic value is expected to increase in the near future.

"We have a disciplined approach that combines the two rankings to allow for stocks that would exhibit exceptional characteristics on either model or strong characteristics on both models," he said.

"It's a very quantitative and disciplined approach that uses very little judgment beyond the selections of our quantitative models," Mr. Bogle said.

Though he declined to specify the holdings in the portfolio, Mr. Bogle said that past holdings have included **L.A. Gear Inc.**, **MCI Communications Corp.**, **Sotheby's Holdings Inc.** and **Airborne Freight Corp.**

For the five and 10 years ended Sept. 30, the equity fund's return on investment was 29.59% and 24.91%, respectively.

Anthony Gray, president of Sun Bank Capital Management, said the stocks in the $750 million portfolio tend to be the "very large, high-quality stocks" including **Merck & Co. Inc.**, **Procter & Gamble Co.** and **General Electric Co.**

"We look for companies that are currently doing well and will do well in the future."

According to Mr. Gray, he first determines which industries he likes, then he looks for homogeneous companies within the particular industry. If, for example, Mr. Gray favors the telephone industry, there are eight companies from which he he can choose.

"We move back and forth among those companies, depending on which ones looks most attractive at the time," he said. "The main strategy is using good quality companies that grow and strict price discipline."

Over the time period, the best performers have been the consumer non-durables which are substantially overweighted in the portfolio, Mr. Gray said.

PIPER is compiled by Rogers, Casey & Associates, Darien, Conn. The equity universe is composed of 330 pooled funds offered by banks, trust companies and insurance companies. ■

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Describing uncertainty is the key

Multiple scenarios improve forecasts

By Robert van der Meer and Frank Sortino

You expect things to go badly and they don't,
that you call good luck.
You expect things to go well and they don't,
that you call bad luck.
Because you lack an understanding of uncertainty,
you put your trust in luck rather than reason.

All allocation models require some description of the uncertainty associated with the expected returns on assets in order to identify an optimal mix, yet the most commonly used procedure of generating the input requires a lot more reliance on luck than reason.

Managing risk has nothing to do with luck. It has to do with one's ability to describe uncertainty.

To illustrate, let's assume you want to make an allocation among income-producing, growth-producing and inflation-protection assets in order to match the three characteristics of the liabilities. This is the approach taken at the more than $14 billion Shell Pension Fund in the Netherlands.

Assume your allocation model contains a data base from which you choose the interval 1960 to the most recent quarter. This is a long enough interval to capture the economic events that might occur in the future and it is up to date. A few key strokes on the computer give you risk and return measures calculated to the fourth decimal place.

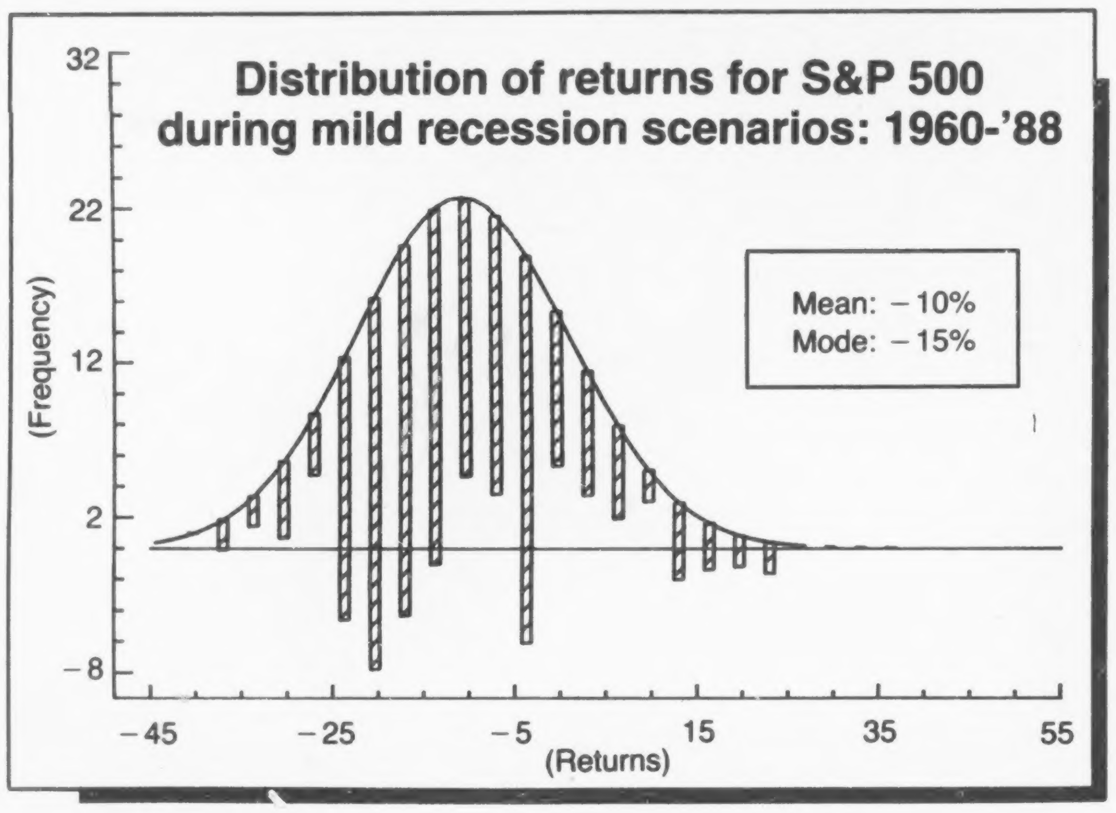
Unfortunately, you have made two assumptions that render the output highly suspect:

- A single interval of history will produce reasonable estimates of the risk-return measures for each asset in a future planning horizon.
- The uncertainty associated with the returns of each asset are bell shaped.

With respect to the first point, there is a plethora of research that indicates the means and standard deviations change dramatically in different time periods. Therefore, the risk-return measures for any historical interval are unlikely to be representative of any period other than the historic interval during which the data were gathered.

Second, while there is wide disagreement on just what shape the distributions may take, most researchers agree they are not bell-shaped.

One solution to this problem lies in identifying the returns-generating mechanism. We prefer to focus on the results rather than modeling the cause. We don't need to know what causes recessions in order to observe them.


Distribution of returns for S&P 500 during mild recession scenarios: 1960-'88

During the 28-year period from 1960 to 1988 many economic scenarios took place. Portfolio managers tend to refer to them in terms of recession, stagnant, growth and inflation periods. These are scenarios for which there seems to be a link between economic phenomena and the financial markets. Of course, there are times, like 1987, when the link is broken, and those intervals are referred to as a period of chaos.

We see from Table 1 that growth periods occurred 46% of the time and chaos reigned about 5% of the time during the 28-year period. Only if each of the seven scenarios recurred with the same frequency could the historical risk-return measures be accurate estimates of future uncertainty. Therefore, using a single period in history as the best estimate of what the future will bring places a great deal of reliance on luck rather than reason.

How to determine what scenario occurred, when it began and when it ended, is not a trivial task. It is doubtful any one methodology could be shown to be superior to all others.

Once the scenarios are identified, one must decide how to generate the distributions. Most researchers have chosen to annualize the monthly data within each scenario to produce a mean and standard deviation.

(The problem with this procedure, and the method used to overcome it, are described in an article titled "The Look of Uncertainty" in the December 1989 issue of Investing magazine.)

The procedure used by the Shell Pension Fund, however, attempts to replicate the underlying distribution rather than use average risk-return measures from historical intervals. It is of little use to identify scenarios unless the underlying distribution for each asset is stable within each scenario.

Research generated by the Pension Research Institute indicates the mean and standard deviation are inadequate for describing the shape of uncertainty associated with securities returns. The hanging histobar graph serves to illustrate this point. If the distribution for the Standard & Poor's 500 Stock Index for mild recessions was bell-shaped, all of the bars — whose lengths represent the likelihood of a given return — would be contained within the bell. Instead, they hang down in the center (indicating kurtosis or a pointedness in the bell shape) and there are more observations in the right tail than the normal distribution would predict (indicating positive skewness). Knowing the average return is −10% is not as informative as knowing the most likely return is −15%.

In other words, four moments — the mean, standard deviation, skewness and kurtosis) are better than two when the distributions are not bell-shaped, and seven scenarios are better than one when trying to use historical data to forecast the future.

While chaos (as we have defined it) may cause fat tails — and fat tails make it very difficult to measure risk — the pattern of chaos may have a certain shape that can be captured, in which case chaos can be managed just like any other scenario.

Instead of assuming only one scenario is the best estimate of what the distribution of future returns will be, the investor can use multiple scenarios to describe the uncertainty being faced in the financial markets.

By assigning a probability to each scenario, a combined distribution can be determined by a computer that accurately represents the investor's view of uncertainty.

We believe scenario forecasting is an intuitively appealing procedure that combines the objectivity of historical data with the manager's subjective opinions about future economic events that will determine the returns on each asset. The Shell Pension Fund has used scenario forecasting since the pioneering work of Pierre Wack at Harvard University in the early 1970s and has found it to be a useful concept for coping with uncertainty. ■

Mr. van der Meer is director of investments for the Shell Pension Fund and an instructor of pension management at Groningen University, Groningen, The Netherlands. Mr. Sortino is director of the Pension Research Institute at San Francisco State University.

TABLE 1

Frequency of economic scenarios: 1960-'88

Growth	46.4%
Mild recession	14.3
Stagnant	10.7
High inflation	8.9
Mild inflation	7.2
Deep recession	7.1
Chaos	5.4

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Tennessee fund hires Callan

NASHVILLE, Tenn. — The $8 billion Tennessee Consolidated Retirement System has hired Callan Associates Inc., Atlanta, to serve as the fund's first consultant.

Callan also will consult on $1.6 billion in assets held in a Tennessee cash pool and a local government investment pool, as well as $110 million in the state's Chairs of Excellence endowment fund.

The fund already uses INDATA, a service of Gordon, Haskett & Co., to measure performance; Callan will provide a check for the system, explained Charles Webb, chief investment officer.

Callan also may conduct an asset/liability study for the fund, but no final decision has been made, Mr. Webb said. ■

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FINANCING

Young companies tap into new market

Venture leasing frees up firms' working capital

By Marcia Parker

While the venture capital industry can't point to thriving times, a growing niche market called venture leasing is a new source of capital for emerging growth companies seeking financing for equipment.

Venture leasing is for start-up, early stage and later-stage companies and allows them to conserve their equity for working capital and other needs, although some providers take warrants to boost the upside potential.

Fledgling companies usually are hard-pressed to tap traditional sources of financing like long-term debt to buy equipment. Venture leasing is often used to complement venture capital as early stage financing; it allows a company to pay for equipment over its life with cost savings or with revenue generated from its use. Some venture leasing groups won't deal with a company that is not backed by venture capital, and most lessors won't back a new company without a track record.

A few leasing companies, financial institutions and others spotted this unfilled need and have started venture leasing groups. They are after the kind of high double-digit returns common in venture capital success stories. While the market is too new to establish a record of returns, more than 20% is a reasonable estimate, the players said.

"It's a developing niche; it's out of its infancy. It's a 5-year-old nationwide industry, but it's still untested and unproven. The perception is that the market is bigger than it is," said Jim LaBe, director of the venture leasing division of Comdisco Inc., a Rosemont, Ill., leasing company that is one of the major players. He disagrees with a forecast by Venture Economics magazine that it will be a $1 billion industry in five years. Comdisco's own estimate is that today's $200 million market will grow about 15% a year.

But Martin Zimmerman, president and chief executive officer of The LINC Group Inc., Chicago, said the growth will depend on what happens in the public securities market. "It's a function of the market. If the IPO market does not come back, the growth will be higher because venture leasing is an efficient way for emerging growth companies to raise capital," he said.

The venture leasing industry is dominated by Comdisco and Equitec Leasing, Oakland, Calif., which do more than $50 million in business each a year. Second-tier players are Dominion Partners, San Francisco, and Technology Funding, San Mateo, Calif., which do $25 million to $50 million. Minor players include The LINC Group and Pace Capital, Emeryville, Calif., which does limited venture leasing.

Some of the players fund limited partnerships from institutional and corporate investors such as finance companies with leasing affiliates, insurance companies, a few retirement systems and others who see an opportunity to reap venture capital returns.

The LINC Group just closed its second venture leasing partnership, a $30 million partnership, funded from individual and institutional investors, including foreigners. The partnership will invest in more than $50 million of equipment, leased to development-stage companies in health care and high technology. Bear, Stearns & Co. Inc. and The Chase Manhattan Bank privately placed the offering. Chase invested $500,000 in the fund along with many European and Mideastern financial institutions. Mr. Zimmerman said the investors are attracted by the fact they are getting a short-term, secured and senior instrument with predictable cash flow and the upside potential that comes from the equity participation in the form of warrants or stock ownership.

Sybase Inc., which designed this data base software system, used venture leasing provided by Comdisco Inc. and other companies.

LINC's first health care venture leasing partnership was offered in 1987 and has made commitments of more than $20 million in equipment. Comdisco executives are discussing doing either a limited partnership or joint venture with major financial service industry firms that would give them a stake in Comdisco deals. "There is an increased level of corporate interest in investing in venture

Continued on page 40

Forces pushing securities industry to change

By Leonard J. Hollie

NEW YORK — The emergence of very powerful foreign securities firms and the globalization of the securities market are but two of several factors that will speed the already dramatic restructuring of the U.S. securities industry in the 1990s, a year-end industry forecast predicts.

The ever-stiffening competition, combined with other industry risks, such as overcapacity in people and capital and deregulation of the financial services industry, will create poor prospects for profitability.

These diverse challenges, according to Moody's Investors Service, are pushing U.S. securities industry managers to retreat from their 1980s goal of becoming global players in a broad range of products and re-examine business mixes and structures.

"The principal factors that will guide these re-examinations will likely be equity returns, the respective firm's core franchises and resource constraints," said John Kriz, Moody's vice president, and Christopher Mahoney, associate director, authors of the report.

The final outcome could be a transformation of the character of certain firms, the authors said.

"Some firms could simply retreat from overseas activities and concentrate solely on domestic business. Others could de-emphasize customer business and stress merchant banking or proprietary trading."

In analyzing 10 U.S. securities firms, including six of the largest — Merrill Lynch & Co. Inc.; Morgan Stanley Group Inc.; The Bear Stearns Cos. Inc.; Salomon Inc.; CS First Boston Inc.; and Shearson Lehman Hutton Holdings Inc. — Moody's sees the ratings of these firms as remaining stable for the immediate term, with potential for downward pressure over the long term.

Moody's expects intense competition to occur through the rest of the century in the securities industry.

The likelihood of more aggressive involvement in U.S. and overseas securities markets by very powerful foreign, especially Japanese, securities firms and banks is a major component of Moody's analysis.

"The vital role of Japan in the world economy provides an important leg-up for its securities-related efforts globally," said Messrs. Kriz and Mahoney in the report. "The Japanese have a long-term strategy in the securities business that should steadily eat away at global market positions and profitability of the U.S. securities firms."

The competition, however, includes not only the big four Japanese securities firms — Nomura Securities Co. Ltd., Nikko Securities Co. Ltd., Daiwa Securities Co. Ltd. and Yamaichi Securities Co. Ltd. — the authors caution, but also Japanese banks and European universal banks.

European competition may be especially strong with 1992 broadening the horizons of Euro-

Continued on page 40

U.S. securities industry outlook

Operating statistics*

	1988	1987	1986	1985	1984	5-yr. average
ROAA less resales (%)	0.90	0.75	1.00	0.84	0.68	0.83
ROAE (%)	12.28	11.70	21.48	20.57	14.50	16.10
EBT/net rev. (%)	15.34	10.70	19.55	19.24	11.70	15.31
Net int. inc./EBT (%)	75.80	79.83	38.97	52.47	123.93	74.20
Capital growth (%)	11.95	8.95	23.21	20.32	13.93	15.49
Fixed-charge cov. (X)	1.17	1.16	1.33	1.22	1.16	1.21

Balance sheet statistics*

	1988	1987	1986	1985	1984	5-yr. average
Assets ($ bils.)	54.97	45.22	42.56	37.99	26.57	24.78**
Equity ($ bils.)	2.07	1.97	1.68	1.31	1.06	24.05**
AE/AA less resales (%)	7.10	6.48	5.01	4.73	5.90	5.86
Long-term borr./eq. (X)	1.08	0.82	0.84	0.71	0.59	0.81
Liq. assets/liabs. (%)	97.29	98.34	98.28	97.8[illegible]	98.63	98.28
Asset turnover (%)	9.49	8.39	9.32	8.90	8.57	8.8

*Peer group average for Bear Stearns, Merrill Lynch, Morgan Stanley, PaineWebber, Salomon and Shearson Lehman Hutton Holdings.

**Compound average growth rate

Source: Moody's Investors Service, New York

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Securities industry

Continued from page 39

pean banks, creating even more powerful financial firms.

The globalization of the securities market is another example of the changed scale of competition. Moody's said there is now a de facto global capital and money market, with domestic markets linked into the global marketplace.

"One byproduct of this globalization is that it has allowed firms to poach in each other's home markets, which drives down everyone's returns," according to the authors.

Domestically, greatly expanded capacity in the securities industry fueled by the 1980s bull market caused the creation of huge and costly infrastructures. In 1980, New York Stock Exchange member broker dealers had $5.4 billion of equity capital and 143,000 employees.

By the end of 1988, their capital had risen 396% to $26.8 billion and personnel had increased 67% to 238,637.

This greatly increased capacity has been supplemented further by significantly heightened activity in the United States from foreign securities and banking firms.

"Given the market conditions and prospects, material industry overcapacity exists that will take years to reduce," said Messrs. Kriz and Mahoney. "This profit outlook also raises securities firms' capacity requirements, because the less strong, stable and diverse a firm's returns are, the more equity it should have. Unlike many other financial institutions, securities' firms capital needs are mostly a function of business and market risks," the authors said.

The squeezing out of the industry's overcapacity will challenge less well-capitalized or less well-positioned firms, and could drive them to merge with stronger firms or with foreign firms, or cause them to fail.

Another threat is deregulation. The Glass-Steagall Act, which bans commercial banks from participating in many aspects of the U.S. securities business, is being steadily eroded and may be eliminated in the near future. Large banks in both the United States and Japan, where legal barriers also are weakening, "are factors that make it easier for firms to penetrate U.S. securities firms' core markets and business," the authors wrote.

There are other domestic challenges that have an impact. The cross-industry acquisitions of U.S. securities firms have changed the scale of competition. For example the mergers of Kidder Peabody & Co. Inc. and General Electric Co.; Donaldson, Lufkin & Jenrette Securities Corp. and The Equitable Life Assurance Society of the United States; Dean Witter Reynolds Inc. and Sears, Roebuck & Co.; Dillon Read & Co. Inc. and Travelers Insurance Co.; and Smith Barney Inc. and Primerica Corp.; and the formation of such companies as Prudential-Bache Securities Inc. have created a new class of players with considerable money and patience, and who have been making significant investments.

To the industry's credit, however, there are some inherent strengths that will allow it to take advantage of this changing environment.

U.S. securities firms have a well-developed skill base, managers are improving management information and control systems, and they are innovative and marketing oriented.

Moody's noted most securities firms managers are taking a harder, more systematic look at their financial-management systems, using methods that have long been employed by industrial companies. Some of the results so far include improved line-of-business profitability systems and formal budgets.

Messrs. Kriz and Mahoney said these trends will continue and will result in making U.S. securities firms a more professionally managed industry. ■

Venture

Continued from page 39

leasing from life insurance companies, auto finance firms and financial firms like investment banks," Mr. LaBe said.

Comdisco will only arrange deals with venture-backed companies. It has made $70 million of investments in 71 companies and holds warrants in many of them. About half of the companies are in the high-technology industry; the rest run the gamut from retail to biotechnology to semiconductors to software.

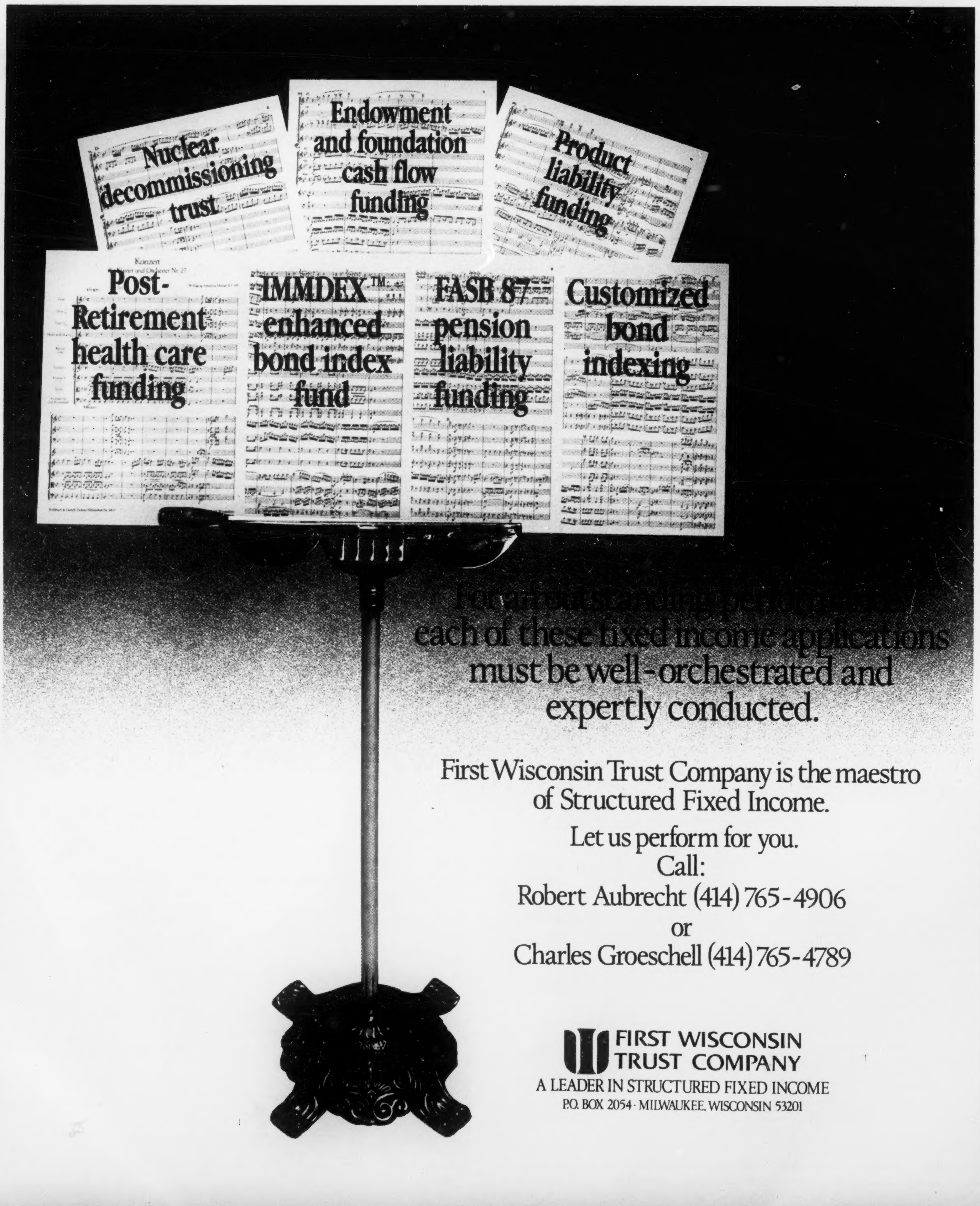
Sybase Inc., an Emeryville, Calif., data base software company, used venture leasing in its formative years arranged by Comdisco and others. "We got in early," Mr. LaBe said, providing warrants-secured equipment leasing. Comdisco has maintained a relationship with Sybase; its non-venture leasing operation is now providing financing. Sybase, in which Lotus Development Corp. has a stake, is expected to go public down the road.

Dave Turner, vice president of operations and administration, said venture leasing helped Sybase expand when it had no track record as a start-up in 1985 through 1987. Then the company was able to secure financing on the basis of its creditworthiness and record. "It allowed us to use our venture capital for working capital," Mr. Turner said, and added he did not mind giving up a little equity in the form of warrants.

Max La Counte, president of Pacesetter Capital, said the companies for which venture leasing is designed are one to four years old and venture capital firms provide the cash flow that keeps them going in the early stages. The development stage of companies in which such funds are invested has lengthened. He said the sources of funds used to be mostly corporations and individuals and trusts, but that has shifted toward some retirement funds and foreign investors.

Pacesetter specializes in leasing programs for manufacturers of high-technology equipment and asset-backed financing for venture capital-backed emerging growth companies.

Mr. La Counte explained that in a typical venture lease, the principal source of cash flow is the monthly revenue stream from rental payments. Rentals account for more than 50% of the overall return to the lessor. A secondary source of cash flow is from equipment residual values, which comprise up to 25% of the return. Most leases assume the lessor will be granted some form of equity participation in the emerging growth company, usually warrants to purchase common stock. ■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PIPER+ debut

Fixed-income funds
(periods ended Sept. 30, 1989)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	7.5 %	22.35%	13.73%	19.27%	16.39%
First quartile	1.66	11.48	8.94	14.3	14.16
Median	1.2	10.35	8.28	12.86	12.32
Third quartile	0.83	9.25	7.63	11.62	11.53
Lowest return	−3.54	1.37	2.19	8.48	9.73
SLH G/C	**0.94**	**11.3**	**7.73**	**12.82**	**11.5**

Continued from page 1

For the 12 months ended Sept. 30, slightly more than 30% of the PIPER+ regular equity universe produced higher returns than the S&P 500, which gained 32.83% for the period. The median PIPER+ return for the period was 30.47%.

For the quarter, the median fund was up 9.96% compared with 10.73% for the S&P 500 index.

Fixed-income managers in PIPER+ beat the Shearson Lehman Hutton Government/Corporate Bond Index for the quarter and three-, five- and 10-year periods. The managers' median returns for the periods were 1.2%, 8.28%, 12.86% and 12.32%, respectively. The index had returns of 0.94%, 7.73%, 12.82% and 11.5%. For the year ended Sept. 30, however, the index was up 11.3% compared with a median for the universe of 10.35%.

The top equity manager for the 12 months is Cheswick Investment Co., Greenwich, Conn. The composite of all of the firm's equity-only accounts totaling $79 million was up 63.14% for the period.

It was followed by Janus Capital Corp., Denver, which reported the composite of its equity accounts totaling $28 million was up 62.8%.

Third was the $160 million Stellar Fund of Provident Investment Counsel, Pasadena, Calif., which was up 56.6%.

Cheswick Investment follows a growth stock philosophy, augmented by the judicious use of some derivative securities, although not options or futures, said Richard R. Cheswick, chief executive officer.

"We had a pure growth stock approach investing in only 10 out of the 90 Standard & Poor's (stock) groups," Mr. Cheswick said. "We were perhaps 35% in pharmaceuticals."

He said the portfolios had between 7% and 10% invested in each of the most important stocks, such as **Philip Morris Cos. Inc.**, **Capital Cities/ABC Inc.**, **Merck & Co. Inc.**, **Eli Lilly & Co.**, **Bristol-Myers Co.** and **Alza Corp.**

"Another reason we finished high is that we used five derivative securities," he said. "We bought Fannie Mae warrants, which have risen as much as five- and sixfold. We bought Eli Lilly warrants, which are up from something like 19 to about 57. We bought two Americus Trust Scores to back up the holdings of Merck and Philip Morris. They act something like warrants and they have tripled or quadrupled. In late 1978, Alza sold a rights offering of one warrant and one share as a unit at 11. We bought all we could and they have gone to 30."

Mr. Cheswick said his firm manages $300 million, most of it in balanced, taxable accounts for wealthy individuals. The performance figures represent 10 accounts that are pure equity accounts, he said. The firm has begun to attract some tax-exempt clients.

Cheswick Investment also is in the first decile of the PIPER+ results for the five-year period.

The best return for five years was reported by Intelligent Investment Management, Pittsburgh, which uses artificial intelligence in its investment process. According to Paul Blake, vice president and principal, the firm uses a computer system combining pattern recognition and probability theory to develop portfolios with a high probability of outperforming the market. The firm's five-year results are a combination of real results since the second quarter of 1988 and simulated results before that.

Second in the five-year period was NFJ Investment Group Inc., Dallas, with a return of 37.04%. NFJ manages about $12 million of its $265 million in tax-exempt assets using the approach that achieved these results.

The performance reported in PIPER+ includes the results achieved by Ben Fischer, NFJ managing director, in running the Select Fund with the identical approach at First RepublicBank Dallas (now NCNB Texas). The approach is a highly concentrated value approach using between five and 10 stocks at any one time.

Although the assets managed using this approach were only in the sixth decile for the latest 12 months, they were in the top decile in the three-year period.

The top special equity account for the 12 months ended Sept. 30 was Fred Alger Management Co.'s $12.5 million small-capitalization fund with 75.56%.

According to David Alger, executive vice president and portfolio manager for the fund, the fund had success with small-cap growth stocks in several industries, including cellular telephones, fast foods, retailing and medical. The fund also led the special equity funds for the latest quarter with a return of 19.14%.

Second for the 12 months was Wall Street Associates, La Jolla, Calif., with its $236 million small-cap growth equity fund, which was up 50.25%.

For the five years, the top return was 28.19% from Columbus Circle Investors, Stamford, Conn. Columbus Circle, which manages $3.7 billion, $2 billion of it in equities, follows an "earnings surprise" discipline, said Don Chiboucas, president.

"We look at a number of leading indicators to identify companies that might generate earnings surprises," Mr. Chiboucas said. "We look at things that provide early warning of earnings surprises, such as the rollout of new products or the trade-weighted value of the dollar. It's a sell discipline as well as a buy discipline."

The representative account reported by Columbus Circle Investors was in the top 10% for the three and five years, and the top 20% for 10 years.

In terms of risk-adjusted return, the tactical asset allocation/balanced managers had the best record for the past five years. Forty-four of the 50 for whom the risk-adjusted return could be calculated had positive alphas.

The top fund among the balanced and TAA accounts for the latest year was J & W Seligman & Co. Inc.'s balanced composite, which was up 32.3%. The New York-based company's balanced fund composite comprises 11 pension fund portfolios totaling $300 million. The equity portion is invested in growth stocks and in the past year had holdings in **LIN Broadcasting Corp.**, **MCI Communications Corp.**, **Federal National Mortgage Association** and **Waste Management Inc.** The fixed-income portion was 15% corporates, 15% mortgage-backed securities and the remainder governments.

It was followed by Cheswick Investment's balanced accounts, which were up 29.41% for the year.

For the five-year period, the top balanced/TAA fund was Chancellor Capital Management's $45.2 million Stockshift fund, at 27.02%.

This fund uses futures to bring its desired equity allocation into line with its expectations for the market.

Los Angeles-based Trust Co. of the West's $862 million convertible strategy composite, with a return of 22.35%, was the fixed-income leader for the one-year period. This fund is in the top 10% of the universe for three-, five- and 10-year periods also.

Bridgewater Asset Management, Darien, Conn., which manages virtually all of its approximately $250 million in institutional assets using a duration-based market timing approach was the top fund for the five-year period, with a return of 19.27%.

According to Ray Dalio, president and chief investment officer, the firm watches four major influences of the environment for bonds: money and credit growth, economic growth, inflation and Federal Reserve policy.

"These give us an EKG of the economy," he said. Based on this information, the firm adjusts the duration of its portfolios. "It is purely a duration-based approach," he said. ■

Retiree

Continued from page 3

to participants who leave prior to retirement. Those who retire are limited to $50,000 in benefits.

"The concept is that our long-term costs are very dramatic. The Financial Accounting Standards Board (accrual) accounting opinion brings into focus that there is a very significant liability the company will have as we continue to provide long-range retiree medical benefits," said Mr. Quinn.

"That led to the conclusion that to provide the benefit, given the high cost levels, employees would have to share in the cost of those programs. Therefore, we established a concept that provides for some employee payments," Mr. Quinn added.

The voluntary employee payments will be adjusted for employee entry age with younger employees paying a somewhat higher amount, Mr. Quinn said. Payments will be adjusted for medical inflation, which has been rising at a greater rate than the general rate of inflation.

AMR's total health care claims and life insurance premiums have risen to $21.1 million in 1988 from $16.4 million in 1986.

Because the funding is from employees and not from the corporation, there are no tax considerations, said Mr. Quinn, and the method of funding AMR's overall retiree medical liability will not be decided anytime soon.

"We are looking at (funding vehicles) all the time, but our view is we think that legislatively there are lots of changes that could occur in the next one or two years that could distort what is available today. We want to make sure what the long-term outlook for these vehicles will be before we decide," Mr. Quinn said.

"We're not going to rush into pre-funding."

Because the FASB accounting rule is not scheduled to take effect until 1992, benefits consultants claim companies can and, in some cases are, take measures to mitigate its impact. Those actions include reducing or eliminating retiree health plan benefits or establishing a pool of assets to pay for future benefits.

Fewer than 5% of companies are funding retiree medical liabilities, according to Richard Ostow, consultant with TPF&C in Washington.

Those that fund do so mostly through 501(c)(9) trusts, a voluntary employee benefit fund set up to provide life, health and accident insurance coverage. Under current regulations, contributions to the trust are limited and income is taxable.

Until the funding issue is clarified, most companies have been focusing on plan design changes including increasing deductibles and co-payments and setting limits on, reducing or scrapping benefits.

Pat Wilson, principal with the benefits consulting company A. Foster Higgins Inc., Philadelphia, said the AMR program represents "a shifting of a portion of the ultimate cost (of retiree health benefits) to the retiree; it's a cost shifting step and is also a funding mechanism."

She was not aware of other companies following the same approach, "at least not to the extent or degree of sophistication of American Airlines."

Mr. Ostow said since the AMR program involved the establishment of a trust account, "in that sense it is funding, and is cost sharing in the sense that active employees pay for some of the future benefits." ■

Dayton Hudson sets

Continued from page 1

this year, the agencies provided investment guidelines for money managers that spell out what can and can't be done in proxy voting and tender offers, and said they can make decisions based on a long-term view. Some managers previously were worried that if they didn't tender shares quickly, they would be breaching their fiduciary duty because they wouldn't cash in on the run-up in the target company's stock.

The policies, initiated by the investment committee for the $680 million in employee benefit assets, also underscore the belief of Mr. Macke and Dayton Hudson's board that short-term investors and hostile takeover activities undermine the stability of America's economy and capital markets.

In the letter to its managers, Dayton Hudson was careful to say it is the company's "preference," rather than requirement, that managers first see what the board of a takeover target recommends before deciding what to do with the shares they hold. Because the company has given its managers discretion, it can't dictate policies.

James Eckman, assistant treasurer, said Dayton Hudson wants its managers "to know we have a long time horizon." Managers don't have to tender shares immediately for fear Dayton Hudson will judge them on the basis of short-term investment performance, Mr. Eckman said.

Mr. Eckman said the actions of Dayton Hudson's small pension fund won't have a major impact, but he hopes it may prompt others to address the issues. He said he has discussed, informally, the changes with other pension fund executives, whose response mostly was "neutral" or "non-committal."

"This decision was made by our investment committee, not by our managers. We did it strictly for investment reasons," he said.

Holding stock in a company instead of tendering it immediately in a takeover can be a sound investment decision. Investing in leveraged buy-outs can be too, he said, but it is the investment committee's view this is "a high-risk, overstated return area."

He said the risk vs. reward profile of leveraged buy-outs has changed. "We feel in the early stages of the life cycle there was potential for high returns. But later it took on a more hostile nature, pricing became more competitive and the return potential went down," he said. "We feel it's a very high-risk kind of investment, where everything has to go right for them to succeed. If there is a downturn, there is a potential for many of them to get into trouble."

James Hale, senior vice president, corporate secretary and general counsel, said Dayton Hudson's investment policy should be viewed in the context of the company's commitment to furthering corporate governance goals, practicing sound portfolio management and speaking out about the ill effects of hostile takeovers.

Al Harrison, executive vice president and manager of the Minneapolis office of Alliance Capital Management, one of Dayton Hudson's managers, said he had no problem with the revised guidelines.

"It's obviously not a mandate," he said, adding the request that the firm take into consideration a board of director's response to a hostile takeover is already part of Alliance's policy. He said the leveraged buy-out restriction isn't a problem either because the firm doesn't invest in them.

"Care, skill and prudence is what guides us. In most cases it wouldn't be a conflict. We're going to do what's best for the beneficiaries as mandated under ERISA. A pension plan board can express its view but can't put us in a position to mandate actions," Mr. Harrison said.

Dayton Hudson will monitor its managers regularly as part of the normal performance review, Mr Eckman said.

Among the outside directors are executives of ITT Corp., Xerox Corp., Meredith Corp., Minnesota Mining & Manufacturing Co., Tennant Co. and Hallmark Cards Inc.

Two years ago, Dayton Hudson succeeded in defending itself against a hostile bid by the Haft Brothers' Dart Group Corp. The bid was derailed in part because of Black Monday and the company's strong response.

At the time, the company wasn't in the best financial shape. Since then, Mr. Macke has made major changes, including divestitures of poor performing assets.

Although Mr. Macke is playing it close to the vest, he is believed to be scouting for acquisitions at a time when a number of retail industry properties are on the block. Dayton Hudson owns, among other stores, Target and Mervyn's. ■

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PENSIONS & December 11, 1989
Investment Age
THE NEWSPAPER OF CORPORATE AND INSTITUTIONAL INVESTING $6 AN ISSUE · $110 A YEAR

Chevron, Dayton Hudson set ESOPs

By Barry B. Burr

The virtual four-month cessation in the formation of employee stock ownership plans ended with a bang as Chevron Corp. and Dayton Hudson Corp. moved to set up two of the largest ESOPs ever soon after Congress adopted a measure keeping a favored part of the tax benefits for such plans.

Chevron, based in San Francisco, announced the creation of a $1 billion employee stock ownership plan, while Dayton Hudson, Minneapolis, expects to move ahead with a $400 million ESOP in the next few months.

Executives for the companies, echoing the sentiments expressed at many other corporations, said they had been waiting since summer for the outcome of legislation that threatened to remove most tax benefits for such plans. The resulting measure, although essentially taking away the interest income exclusion for lenders, preserved the more favored dividend deduction, encouraging their companies to proceed with the plans, the executives said.

Chevron and Dayton Hudson are a "harbinger of what's likely to come," said Corey Rosen, executive director for the National Center for Employee Ownership Inc., Oakland, Calif.

"We're still going to continue to see growth of ESOPs in public companies, but maybe at a lower rate (than the flurry of activity in the first half of this year), simply because a lot of the companies . . . have already done it."

Benefits experts are bracing for a new government fusillade on pension funds — page 2.

The new interest exclusion rule, however, "will be a boost" for the UAL Corp.'s management and employee effort to buy the company, he suggested. If an ESOP acquires more than 50% of the United Airlines parent's stock, "there will be many more people chasing that loan because it will be one of the few available" to qualified lenders to use the interest exclusion.

At Duff & Phelps Inc., Chicago, a major adviser in helping corporations create ESOPs, Chester A. Gougis, executive vice president-financial consulting, suggested employee motivation and anti-takeover reasons for forming ESOPs "still may be attractive, but ESOPs are less attractive along tax lines."

The measure — adopted by both the House and Senate Nov. 22, the final day of this year's session — essentially keeps intact the provision enabling corporations to deduct from their taxes dividends paid on stock acquired by a leveraged ESOP.

"That's clearly what's driving ESOPs," said Mr. Rosen.

But Congress eliminated for most leveraged ESOPs the provision allowing lenders to exclude half of the interest income on loans to the plans and, thus, enable corporations to borrow for less. Effective for transactions completed after Nov. 17, only ESOPs that hold more than 50% of a corporation's shares may use the interest exclusion. As a result, the provision excludes most corporations, whose ESOPs generally hold less than 15% of their sponsor's stock.

Allowing for a transition, the measure allows for lenders to still exclude half of the interest income if the ESOP was completed between July 10 and Nov. 17 and if the ESOP acquired 30% of a company's stock. Before the new legislation, there was no threshold

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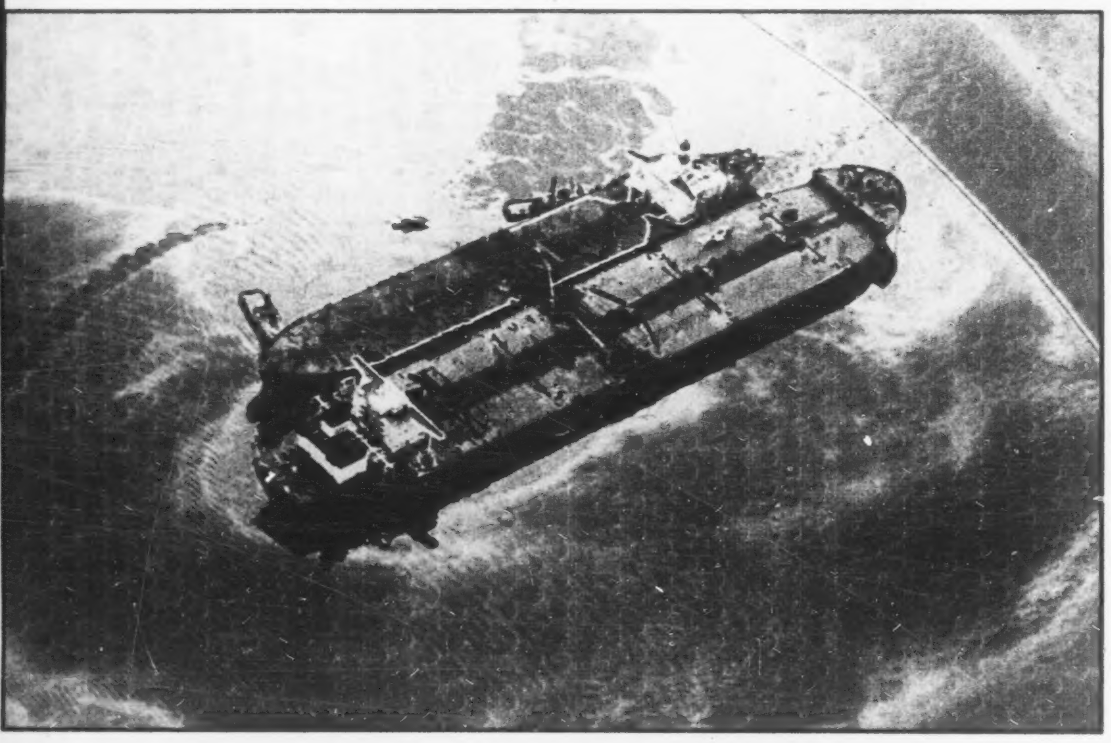

The Exxon Valdez oil spill spurred the creation of the Valdez Principles, a major issue in the coming proxy season.

Ecological issues swell proxy filings

By Trudy Ring

An explosion of interest in the environment and still-increasing focus on corporate activities in South Africa and Northern Ireland have combined to produce a record number of shareholder resolutions on social issues.

A total of 266 resolutions have been filed for consideration at corporate annual meetings in 1990, up from 202 in 1989, according to the Investor Responsibility Research Center, Washington.

The big reason for the almost 32% increase is environmental issues: There are now 40 resolutions on environmental subjects compared with al-

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GM boosts equity in AMI

$75 million infusion cuts size of junk-bond financing

By Steve Hemmerick

General Motors Corp.'s pension fund invested an additional $75 million in equity in the leveraged buy-out of American Medical International Inc., Beverly Hills, Calif., reducing the amount of junk bonds that had to be sold to finance the buy-out.

Last November, IMA Holdings, a private investment group of GKH Partners L.P., and First Boston Investments, a subsidiary of First Boston Corp., New York, acquired AMI in a $1.67 billion transaction valued at $3.09 billion in cash and debt assumption.

GKH investors that participated in the AMI buy-out include the Pritzker family of Chicago, several insurance companies and four major pension investors — the $5.2 billion Boeing Co. fund, Seattle; the $38 billion General Motors fund; the $9 billion Los Angeles County Employees' Retirement Association; and the $38 billion New York State & Local Retirement Systems.

Without GM's additional cash, GKH would have had to make a second capital call of $35 million on its limited partners to raise its equity investment in the deal to $185 million from $150 million to satisfy outside lenders, sources said. (The total equity in the deal is $285 million).

AMI®

The GM pension fund, however, through its investment vehicle First Plaza Group Trust, agreed to purchase an additional $75 million of equity securities in IMA Holdings Inc., which made the acquisition.

That additional cash, with General Motors' earlier agreement to purchase a portion of $125 million in subordinated debt securities, reduced the amount of junk bonds that had to be sold to $475 million from $600 million. GM's financial assistance came at an opportune time because of the downturn in the junk bond market.

The high-yield securities were needed to refinance the bridge loan that was made to complete the acquisition of AMI, which reduced interest costs by an unspecified amount.

Since GM's equity purchase gives it a bigger share in the AMI purchase, one source commented, "I am wondering if General Motors now has controlling interest in the entire deal." GM officials would not comment on the AMI acquisition.

As a result of GM's equity purchase, First Boston's investment also was reduced, to $60 million from $100 million.

GKH Partners, Farmington, Conn., is an investment partnership organized to make long-term equity and equity-related debt investments. It began in 1988 and it had, before the AMI acquisition, more than $545 million in equity capital available.

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LATE NEWS

Lawsuit against Crestar dropped

WASHINGTON — Administrators for the U.S. News & World Report/The Atlantic Monthly 401(k) plan agreed to drop a lawsuit that charged Crestar Bank with defrauding the $20 million plan.

According to Alice N. Rogoff, a member of the plan's profit-sharing committee, attorneys for the plan only agreed to dismiss the suit after Crestar officials promised to pay the plan $2 million locked up in the bank's troubled real estate investment fund by Dec. 31.

Lucy D. Kennedy, a vice president for marketing with the Richmond, Va.-based bank, however, disputed that, saying that after agreement to drop the suit was reached, Crestar officials "independently" decided to advance money to the real estate fund to cash out investors.

When the money from the real estate is received from Crestar, the plan will place it with Fidelity Management Trust Co., Boston, which already runs $18 million of the plan's assets. Plan participants will determine how the assets are invested.

Utility moves into foreign arena

GREEN BAY, Wis. — The $250 million Wisconsin Public Service Corp. pension fund, making its initial move into international investments, has placed $10 million each in commingled funds run by Oechsle International Advisors, Boston, and WorldInvest Ltd., London.

The funds, equity with Oechsle and fixed income with WorldInvest, will be funded from cash and a paring of the fund's accounts with existing domestic managers, according to Dan Bittner, vice president and treasurer.

Mr. Bittner said the international commitments will be funded in about two months.

The fund has set a target allocation of 5% of assets in both foreign equity and fixed income.

Mr. Bittner said, however, there are no plans for further allocations at this time.

Becker, Burke Associates Inc., Chicago, assisted in the allocation study and search.

Puerto Rico teachers fund hires

SAN JUAN, Puerto Rico — The $650 million Puerto Rico Teachers Retirement Fund has hired Bear Stearns Asset Management, New York, to manage $140 million in a short-term fixed-income account, said Manuel Escobar, a consultant with Merrill Lynch, Pierce, Fenner & Smith Inc., San Juan.

Mr. Escobar said no managers were terminated and the money for the account came from reductions in the fund's other fixed-income accounts.

Wilshire Associates, Santa Monica, Calif., also was a consultant on the search.

AMR advisory unit adds business

FORT WORTH, Texas — AMR Investment Services Inc., the investment management subsidiary of AMR Corp., recently added to its assets under management.

Metro Airlines Inc., Dallas, hired AMR to manage the assets of its recently established, but as yet unfunded, 401(k) plan, according to Brian Miller, treasurer.

Mr. Miller said AMR also was hired to manage its surplus corporate cash, which varies from $1 million to $10 million, in the AMR short-term money market fund.

In addition, First Southern Trust Co., an independent Dallas trust firm specializing in small and midsize pension and employee benefit funds, recently placed an additional $18 million with the AMR unit, said Ron Simmons, vice president at First Southern Trust.

He said the most recent allocation to the AMR equity, fixed, balanced and money market funds brings the trust company's total allocation on behalf of its clients to $90 million.

The recent moves bring AMR Investment Service's total assets under management to almost $1 billion.

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Scorecard questionnaires in the mail

Questionnaires are in the mail for *Pensions & Investment Age*'s annual Scorecard report on investment managers' new business. In order to be included in the Feb. 5 report, money managers must return the questionnaires by Dec. 31. If you have any questions, please contact Christine Philip, directory coordinator, at (312) 649-5217.

Getting a new perspective

Boeing, Florida executives hop to management firms

By Steve Hemmerick and Curtis Vosti

David E. Kushner, left, formerly with the Florida State Board, and Jack M. Tuhey are forming an equity management firm.

Two pension fund executives have resigned to join money management ventures.

Elizabeth Marcoux, former director of trust investments for Boeing Co., Seattle, now is a principal in Genesee Partners, Bellevue, Wash., which plans to offer a manager-of-managers trust that will invest pension assets in short selling and equity strategies.

David E. Kushner, manager of internal equities for the $18.7 billion Florida State Board of Administration, Tallahassee, resigned effective Jan. 1 to become a general partner in T-K Capital Management. He formed the firm with general partner Jack M. Tuhey, former executive vice president and marketing director of The Burridge Group Inc., Chicago.

Ms. Marcoux had been at Boeing 5½ years, where she managed day-to-day operations for more than $8.5 billion in company employee benefit assets. Terry Teague, an assistant treasurer, will succeed Ms. Marcoux effective Jan. 1.

Mr. Kushner spent 4¾ years at the Florida board, where he was responsible for a $443 million internally managed equity portfolio and a $3.5 billion index fund. His position is not expected to be filled until after the first of the year, according to Lan Janecek, director of equities at the Florida board.

Ms. Marcoux acknowledges she will have a challenging job: Few pension funds are willing to short stocks because of perceived added risk and unfamiliarity with the subject, but many more are showing interest in the strategy.

One of the firm's clients is Frank Russell Trust Co., Tacoma, Wash. Frank Russell Trust has an undisclosed amount invested in

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Solidarity leader Lech Walesa made a pitch for investment in Poland during his recent trip to the United States.

Michigan commits to Freedom Bonds

By Terry Williams

Polish "Freedom Bonds" do not yet exist, but the idea of getting in on the ground floor of Eastern European investment opportunities was enough to make a public pension fund from Michigan commit to buying $10 million of a proposed $100 million bond issue.

The Michigan Employees' Retirement Systems signed a letter of intent to invest $10 million of its $18 billion in assets in Polish Freedom Bonds, Michigan State Treasurer Robert Bowman announced Nov. 18.

The Illinois Board of Investment also is considering buying $25 million of the proposed issue with pension fund money, according to James Stapleton, chief fiscal officer for state Treasurer Jerry Cosentino.

But some economists and industry players have criticized and questioned the suitability of the bonds for pension funds.

"If you believe in free enterprise and capitalism, you'll believe in it at any age — 2 years old or 200 years old," said Mr. Bowman. "In this case, Poland's (democracy) is 3 months old."

Mr. Bowman said he does not expect to be able to buy the bonds until the spring, and there are a number of conditions Poland has to meet before the purchase is complete.

According to Jay Rising, Michigan chief deputy state treasurer, the purchase is contingent upon Poland getting commitments for the remaining $90 million in Freedom Bonds and the approval of a $500 million aid package from the United States.

The Polish government also will have to peg its currency, the zloty, to the dollar and balance its budget, said Mr. Bowman.

Another stipulation is that proceeds from the sale of the bonds can only be used for capital formation and capital equipment,

Continued on page 46

Pension issues to resurface

By Joel Chernoff

WASHINGTON — If you thought this year's budget debates in Congress affecting pension and benefit plans were exciting, just wait until 1990.

Next year, Congress has to trim the budget deficit by some $64 billion to meet Gramm-Rudman-Hollings Act targets, which will require $30 billion to $50 billion in new revenue. This year, it only had to come up some $14 billion in new revenue.

"The administration will be scrambling, and I don't know what pieces they will pick up," said Elaine Church, a principal at Price, Waterhouse & Co., Washington.

Jim Kaitz, director-government relations at the Financial Executives Institute, Washington, anticipates "a lot of headaches" and "taking a lot of aspirin" in 1990.

This year, in a budget-reconciliation process that played like a soap opera on issues involving capital gains tax reduction and repeal of Medicare catastrophic coverage and non-discrimination rules for welfare plans, virtually all major rule changes involving pension plans were stripped out of the final bill.

Gone was a ban on employers' recapture of surplus pension assets. Gone, too, was a proposal to allow employers to transfer excess

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Value investing earns rewards for sponsors

Country selection, decline in dollar increase returns

By Margaret Price

Smart value investing, coupled with a modest decline in the dollar, were the common themes rewarding many of the top performers in Pensions & Investments' Performance Evaluation Report for the third quarter.

Successful funds also gained from strong market performances in certain countries, especially Hong Kong, which vaulted 23.6% in U.S. dollar terms during the period, according to the Morgan Stanley Capital International Europe Australia Far East Index.

The No. 1 finisher in the quarter, the $32 million International Equity Fund of Harris Trust and Savings Bank, Chicago, returned 17.22%. Among other factors, that fund benefited from successful value-oriented stock selections in Japan, where the fund had about a 60% weighting, and a 5.75% exposure to the French market. According to EAFE data, the Japanese market rose 12.2% and the French, about 17% in the quarter.

Worst performers for the quarter and year ended Sept. 30 were international/global bond funds. During the third quarter, factors ranging from fears of worsening inflation worldwide to attempts by some foreign governments to buttress their currency thwarted bond gains. After a good first half, U.S. bond performance generally lagged that of other markets — a factor which helped restrain advances in global fixed-income investments, noted Barry Gillman, managing director and chief executive officer of PCM International, Newark.

In the third quarter, PCM International's $80 million Global Yield fund ranked last of the 39 funds measured in the PIPER universe, with a 2.93% performance according to PIPER data.

PCM International's approximately $400 million Global Bond fund ranked second to last at 3.36%. That compares with 2.96% return in dollar terms of the Salomon Brothers World Government Bond Index.

Top-performing equity funds again bested major indexes during the quarter. While the EAFE index posted a 12.46% gain, the FT-Actuaries Europe and Pacific Index increased 12.6%. That put both indexes in the fifth decile of PIPER.

In comparison, both EAFE and the FT-A Europe and Pacific Index posted negative returns in the second quarter and were essentially flat in the first quarter. This year, these indexes' heavy exposure to the Japanese market have helped dampen or restrain

Continued on page 28

Commingled international funds

3-month returns

	%
Harris Trust (Eq.), Ill.	17.2
Wellington Trust (Emerg. eq.)	17.1
Wilmington Trust (Eq.), Del.	16.5
Confederation Life (Eq.), Ga.	16.2
NCNB Texas (Eq.)	15.5
Bankers Trust (Eq.), N.Y.	15.5
Aetna Capital (Eq.), Conn.	14.2
Wellington Trust (Pacific Basin)	13.7
Putnam Cos., Mass.	13.1
PCM Int'l (Print eq.)	13.1
Travelers Cos. (Index), Conn.	13.1
Union Bank (Eq.), Calif.	12.9
Prudential (Foreign eq.), N.J.	12.8
MTrust (Eq.), Texas	12.8
Wellington Trust (Eq.)	12.7
Travelers Cos. (SA W), Conn.	12.6
FTA Europe & Pacific Index	**12.6**
Wells Fargo (Eq.), Calif.	12.6
MSCI EAFE Index	**12.5**
American Nat'l Chicago (Eq.)	12.4
Chase-CMB (EAFE index), N.Y.	12.4
State Street Bank (Index), Mass.	12.3
Bankers Trust (EAFE index), N.Y,	12.2
FTA World Index	**12.0**
The Principal (Eq.), Iowa	11.8
Citicorp Invst. (Eq.), N.Y.	11.7
MSCI World Index	**11.7**
WorldInvest (Eq.), N.Y.	11.2
IDS Trust (Eq.), Minn.	10.5
Assoc. Bank-Neenah (World)	10.5
CIGNA (Eq.), Con.	10.2
Boatmen's Trust (Coll. W), Mo.	10.1
Marine Midland (Eq.)	10.1
Chase-CMB (Eq.), N.Y.	9.4
WorldInvest (Fixed), N.Y.	6.9
Trust Co. of the West (Global)	5.7
PCM Int'l (Foreign bond), N.J.	5.5
Citicorp Invst. (Fixed), N.Y.	5.2
IAA Trust (CTF-I), Ill.	4.9
MTrust (Bond), Texas	4.3
Chase-CMB (Fixed), N.Y.	4.3
PCM Int'l (Global bond), N.J.	3.4
PCM Int'l (Global yield), N.J.	2.9

1-year returns

	%
Wellington Trust (Emerg. eq.)	38.0
Confederation Life (Eq.), Ga.	34.6
Wilmington Trust (Eq.), Del.	34.2
Bankers Trust (Eq.), N.Y.	32.4
NCNB Texas (Eq.)	31.6
Putnam Cos., Mass.	31.6
WorldInvest (Eq.), N.Y.	31.4

Continued on page 28

Pacific Telesis has targeted a large share of its increased international allocation to Japan-only investments.

PacTel increases foreign exposure

SAN FRANCISCO — The approximately $10 billion pension fund of Pacific Telesis Group, San Francisco, has raised its international allocation to 15% of total assets, shifting $495 million and hiring eight additional international equity money managers.

Among the new money managers are HD International, London, hired to manage $100 million of Europe-only investments; and Yamaichi International Capital Management, Tokyo, and Walter Scott & Partners, Edinburgh, both of which have been hired for $50 million each in Japan-only investments. Yamaichi is providing a Japan-only passive-plus tilt strategy.

The fund gave $20 million to Rowe Price-Fleming International Inc., London, and $10 million to Sit/Kim International Investment Associates Inc., New York, for investments in the Pacific Rim except Japan.

Wells Fargo Investment Advisors, San Francisco; State Street Bank and Trust, Boston; and Dimensional Fund Advisors, Santa Monica, Calif., were hired to passively manage a total of $165 million.

Wells Fargo and State Street will split $150 million while the remainder goes to Dimensional.

The fund also invested $100 million in protected equity notes in Japan in a deal put together through Bankers Trust Co.

According to Jerry Koch, the pension fund's director-investment administration, money for the new international investments came from domestic equity holdings, lowering that allocation to 50% from 55%. Mr. Koch said the fund terminated some generally "lower-performing" money managers and trimmed allocations to some other managers. He did not name the firms involved.

Pacific Telesis used Frank Russell Co., Tacoma, Wash., for research on international money managers.

Book entry urged for U.S.

Group of Thirty proposal would speed settlement time

By Curtis Vosti

NEW YORK — A U.S. committee studying ways to increase efficiencies in international security clearance and settlement systems has recommended U.S. financial markets move to book-entry procedures within two years.

The report was in response to a series of recommendations from the London-based Group of Thirty, consisting of financial leaders throughout the world. The nine recommendations, to harmonize clearance and settlement systems worldwide, were forwarded to country-specific committees so members could study how the recommendations could affect their home markets.

Only two of the nine recommendations were deemed to be a pressing need for the U.S. markets.

The U.S. committee said it believes acceptance of the book-entry system lays the groundwork for shorter settlement periods. The Group of Thirty has recommended the settlement period be three business days, as opposed to the five-day period common in the United States.

The other Group of Thirty recommendation that would affect the U.S. market is one requiring a more uniform use of same-day funds in settling trades. The U.S. committee plans to issue a report on that recommendation by the end of the year.

The committee called for an "extensive educational effort" by industry trade groups and securities firms to accustom investors to accept the electronic book-entry system and do without stock certificates.

The report noted institutions must be encouraged to speed the matching — or comparison — of trades to a same-day or trade-day-plus-one period from the current two-day norm.

Under the study group's plan, once book entry is in effect, existing stock certificates would be withdrawn from circulation when stocks are sold and logged as book entries.

The system would provide opportunities for cost reduction, which would be welcome in the wake of the current slump in securities industry trading activity and profitability, the report noted. Although the shift would necessitate changes in the back-office operations of securities firms, the report said these costs would likely be more than offset by the savings.

The report noted mutual funds and Treasury securities are already available only in book-entry form for retail customers, as are about 30% of all newly issued municipal bonds and some corporate bonds.

The U.S. study committee is headed by Lewis Bernard, managing director of Morgan Stanley & Co. Inc. Mr. Bernard appointed an advisory committee, representing a broader base of industry leaders in securities firms, banks and investment institutions, to review the recommendations. ■

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Value

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performance. Last year, the opposite held, as the indexes outperformed all international funds.

But many funds are not embracing EAFE or FT-A Europe and Pacific market capitalization weightings in their foreign exposures. The approximately $10 million International Emerging Stock fund of Wellington Trust Co., the second best performer for the quarter and tops for the year ended Sept. 30, only had about a 21% Japanese stock market weighting at the third quarter's end. Yet, "my Japanese stocks were up 41% in the last year. That was more than twice as much as the Japanese index overall," said Marie-Claude Bernal, vice president, Wellington Trust.

Astute stock picks also produced, in U.S. dollars, a 54% gain in the Spanish market and a whopping 131% from Belgian stocks in the last 12 months.

According to Ms. Bernal, Wellington's Emerging Company Stock fund invests in issues of smaller companies, those with maximum annual revenue of $250 million. The fund seeks stocks with "low valuation levels, and also with an open capital structure, so the company can be taken over," Ms. Bernal said, adding in the past year 8% of the portfolio consisted of stocks that were takeovers. Last quarter, the fund sold its holding in **Lemona,** a Spanish real estate company whose stock tripled in price this year on takeover talk.

Stellar Belgian performers included **Barco Electronics,** whose price rose threefold in about two years, and **Deceuninck**, a maker of window frames, whose stock price quintupled in the last three years, according to Ms. Bernal. The overall "Belgian market wasn't that strong. It (advanced) less than EAFE during the last quarter. But my small company stocks did very well," she added.

The $9.1 million International Collective Equity Fund of Wilmington Trust, a fund also known as the International Multi-Manager Fund, uses three outside advisers: Edinburgh Fund Managers, Edinburgh, Scotland; Clemente Capital Management, New York; and Scudder, Stevens & Clark, New York. With a third-place return of 16.49% for the quarter and a third-place 34.24% for the year ended Sept. 30, the fund has benefited from the diversity of styles as well as differences in their geographic expertise, said Catherine Gordon, the fund's portfolio manager.

In the third quarter, the Multi-Manager Fund advanced on "country weightings more than any particular stock pick," said Ms. Gordon. For instance, "most of the managers placed fairly heavy bets in Hong Kong" in the wake of that market's plunge following the late spring political crackdown in China. At the end of the third quarter, the fund had a 7.9% Hong Kong weighting, up from 5.8% at the end of the second quarter.

The Multi-Manager Fund also benefited included a 6.1% exposure to the French market.

The $5.3 million International Common Stock fund of Confederation Life Insurance Co., Atlanta, No. 4 for the quarter, also ranked second for the one- and three-year periods. That fund returned 16.24% for the quarter and 34.62% for the year. Its three-year annualized return was 23.46%.

According to Peter Clark, assistant vice president-securities in the Toronto office, the fund "concentrates on value" investing. In the third quarter, four of the fund's top five performing stocks were Japanese, even though the fund was underweighted in that market. In the past year, the fund maintained about a 30% exposure to the Tokyo market, Mr. Clark said.

Among Confederation's winners in Japan were: **Orix**, a financial leasing company which vaulted 84% in the third quarter, and **Fuji Machine**, close behind with an 82% gain during the period. Mr. Clark said Fuji Machine "is enjoying an earnings explosion," while Orix became discovered as a "cheap stock within the financial sector in Japan." Other sterling stocks included **York Benimaru**, a Japanese food retailer "enjoying good earnings growth," and the **Thai Fund**, which leaped 40% during the quarter. In the latter case, many "foreign investors have been keen on buying the Thai market, and (the Thai Fund) tended to be the vehicle many used," said Mr. Clark. ■

Continued from page 23

Harris Trust (Eq.), Ill.	30.1
Assoc. Bank-Neenah (World)	29.3
Trust Co. of the West (Global)	27.6
Travelers Cos. (SA W), Calif.	27.1
FTA World Index	**25.9**
MSCI World Index	**25.8**
Aetna Capital (Eq.), Conn.	25.5
Wellington Trust (Eq.)	25.4
CIGNA (Eq.), N.Y.	25.4
The Principal (Eq.), Iowa	24.9
PCM Int'l (Print eq.), N.J.	24.0
Bankers Trust (EAFE index), N.Y.	22.6
MSCI EAFE Index	**22.6**
Travelers Cos. (Index), Conn.	22.3
FTA Europe & Pacific Index	**22.2**
State Street Bank (Index), Mass.	21.8
Wells Fargo (Eq.), Calif.	21.7
Prudential (Foreign eq.), N.J.	21.3
Union Bank (Eq.), Calif.	21.1
Wellington Trust (Pacific Basin)	21.1
American Nat'l Chicago (Eq.)	21.0
Boatmen's Trust (Coll. W), Mo.	20.9
Chase-CMB (EAFE index), N.Y.	20.8
Citicorp Invst. (Eq.), N.Y.	20.4
Chase-CMB (Eq.), N.Y.	18.3
Marine Midland (Eq.), N.Y.	17.7
IDS Trust (Eq.),Minn.	17.0
MTrust (Eq.), Texas	15.9
PCM Int'l (Global bond), N.J.	11.9
IAA Trust (CTF-I), Ill.	10.5
PCM Int'l (Global yield), N.J.	9.5
WorldInvest (Fixed), N.Y.	8.1
Citicorp Invst. (Fixed), N.Y.	6.3
MTrust (Bond), Texas	6.1
PCM Int'l (Foreign bond), N.J.	4.1
Chase-CMB (Fixed), N.Y.	2.7

5-year returns

	%
Chase-CMB (EAFE index), N.Y.	36.7
MSCI EAFE Index	**36.6**
FTA Europe & Pacific	**36.6**
American Nat'l Chicago (Eq.)	36.5
WorldInvest (Eq.), N.Y.	36.1
Wells Fargo (Eq.), Calif.	35.8
Bankers Trust (Eq.), N.Y.	34.1
Wellington Trust (Pacific Basin)	31.7
CIGNA (Eq.), Conn.	31.5
Chase-CMB (Eq.), N.Y.	31.0
Aetna Capital (Eq.), Conn.	30.6
Putnam Cos., Mass.	30.5
Marine Midland (Eq.), N.Y.	29.8
Citicorp Invst. (Eq.), N.Y.	29.5
Wellington Trust (Eq.), Mass.	28.9
NCNB Texas (Eq.)	27.9
Union Bank (Eq.), Calif.	27.9
MSCI World Index	**27.8**
FTA World Index	**27.8**
Boatmen's Trust (Coll. W)	27.4
PCM Int'l (Global bond), N.J.	26.0
IDS Trust (Eq.), Minn.	25.7
Travelers Cos. (SA W), Conn.	25.5
WorldInvest (Fixed), N.Y.	22.2
PCM Int'l (Foreign bond), N.J.	21.3
Citicorp Invst. (Fixed), N.Y.	18.5

10-year returns

	%
American Nat'l Chicago (Eq.)	22.0
MSCI EAFE Index	**21.8**
Putnam Cos., Mass.	20.0
MSCI World Index	**19.3**
Citicorp Invst. (Eq.), N.Y.	18.7

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PIPER

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Growth, value make the difference

Time period determines better style

By Leonard J. Hollie

Investments in growth stocks propelled some bank and insurance company commingled special equity accounts into the ranks of top-performing funds for the quarter and year ended Sept. 30, while an emphasis on value paid off in the longer term in Pensions & Investments' Performance Evaluation Report.

The top finisher for the year was the $169 million, 17-year-old Chase Investors Management Corp. CMB Medium Capitalization Fund, New York. It returned 58.9% through investments in companies with capitalizations from $500 million to $1.5 billion.

"We are looking to be niche players in companies with above-average earnings prospects," said Mike Schonberg, managing director. "The overall exposure is on strong visible growth areas, while shunning cyclicals and technology stocks."

Among the fund's holdings, **Edison Brothers Stores Inc.**, was up more than 60%; **Calgon Carbon Corp.** was up 30% and **Tyson Foods Inc.** rose 60%, Mr. Schonberg said.

The median special equity fund in the 104-fund PIPER universe returned 27.97% for the year, compared with the Standard & Poor's 500 Stock Index return of 32.83% and the Russell 2000 return of 11.92%.

Some of the worst performers were invested heavily in technology stocks and small-company stocks, which didn't perform well in a very volatile market.

"Technology stocks brought down our portfolio in the second quarter," said Dave Urben, assistant vice president and fund manager of the $21 million Supplemental Equity Fund of Union Bank, San Diego, Calif. The fund came in last for the 12-month period, with 9.38%, but was first in the 10-year returns. "We had a very difficult second quarter, (the fund returned 0.78%) but we bounced back in the third quarter," Mr. Urben said.

For the year, Mutual of New York's Special Equity Fund placed second with a return of 47.9%.

The third quarter's top performer was the 6-year-old $7.3 million IDS Trust Emerging Growth Fund, Minneapolis, with a return of 19.21%. Gordon Fines, IDS president, attributed the fund's showing to investments in consumer retail and health care stocks and to limited exposure in technology stocks. The fund tries to invest in companies that managers think will grow by 20% a year for three or more years, Mr. Fines said.

For the third quarter, the median PIPER fund returned 8.85%, the S&P 500 returned 10.73% and the Russel 2000, 6.75%.

Some of the IDS fund's largest health care holdings include **Oracle Systems Corp., H.M.S.S. Inc., FHP International Corp.** and **New England Critical Care Corp.** Its largest holdings in consumer stocks include **Sotheby's Holdings Inc.** and **L.A. Gear Inc.**

Coming in second for the quarter was New York-based Chancellor Capital Management's Emerging Health Care Fund, with a return of 16.87%.

NCNB Texas' $13 million Select Equity Fund won top honors in both the three- and five-year periods, with compound annualized returns of 40.37% and 35.49%, respectively.

The median PIPER special equity fund for the periods returned 16.78% and 16.93%, respectively. All returns for periods of more than one year are compound annualized. For the same periods, the S&P returned 18.64% and 20.3% respectively, and the Russell 2000 returned 11.92% and 13.38%.

The value-oriented NCNB fund holds a small number of stocks and looks for companies with a low price-earnings ratio on a trailing basis.

"We are looking for stocks that are quite inexpensive on a valuation basis, and that look cheap in terms of cash flow," said David Gardner, senior vice president and director of equity research. "This is not a takeover fund, but we are also looking for companies that are about to undergo a corporate revamping."

The five stocks in the fund are **Caesars World Inc., King World Productions Inc., NYNEX Corp., Harley-Davidson Inc.** and **Ramada Inc.**

Mr. Gardner said his value-oriented approach was able to perform well even though a value style rarely outperforms the market indexes. "This fund is shorter term than most commingled funds," he said. "And though we don't outperform the indices in the short term, over the long term value does tend to outperform the indices."

At Union Bank, investments in consumer and health care stocks were responsible for the fund's 23.3% top 10-year performance, said Mr. Urben.

"The fund invests in small emerging growth stock companies that are in areas of rapid growth," said Mr. Urben. "We are looking for companies that have products or a niche that allows them to grow rapidly over time."

Some of the fund's largest holdings include **Liz Claiborne Inc.** and **Autodesk Inc.** Some of the stocks in their medical field holdings include **Nichols Institute** and **Diagnostek Inc.** Another stock Mr. Urben expects to show rapid growth is **Fastenal Co.**, which is a distributor of industrial parts. The company grew 38% this year, Mr. Urben said.

For the 10 years, the PIPER median returned an annualized 17.43%, beating the S&P's 17.35% and the Russell's 15.47%. ■

PIPER special equity funds
(periods ended Sept. 30)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	19.21%	58.90%	40.37%	35.49%	23.30%
First quartile	11.67	34.86	20.24	20.86	19.44
Median	8.85	27.97	16.78	16.93	17.43
Third quartile	6.55	22.26	13.75	14.20	14.87
Lowest return	2.52	9.38	7.16	6.81	12.56
S&P 500	**10.73**	**32.83**	**18.64**	**20.30**	**17.35**
Russell 2000	**6.75**	**21.49**	**11.92**	**13.38**	**15.47**

PIPER + special equity funds
(periods ended Sept. 30)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	19.14%	75.56%	28.83%	28.19%	29.28%
First quartile	13.07	37.74	22.73	23.47	23.88
Median	9.80	28.20	18.50	19.91	21.67
Third quartile	7.10	23.15	14.74	16.94	17.66
Lowest return	1.17	16.73	10.49	11.41	15.08
S&P 500	**10.73**	**32.83**	**18.64**	**20.30**	**17.35**
Russell 2000	**6.75**	**21.49**	**11.92**	**13.38**	**15.47**

PIPER + balanced/TAA funds
(periods ended Sept. 30)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	11.40%	32.34%	26.62%	27.02%	24.79%
First quartile	7.00	23.62	15:41	18.77	17.07
Median	5.69	21.15	14.06	17.30	15.44
Third quartile	5.04	17.78	12.24	15.94	14.77
Lowest return	1.00	9.66	8.55	13.21	13.50

Top quartile commingled special equity funds

3-month returns

	%
IDS Trust (Emerg. growth F)	19.2
Chancellor (Emerg. health care)	16.9
Central Fidelity (Growth), Va.	16.9
Trust Co. of the West, Calif.	16.1
Lincoln Nat'l (Opp.), Ind.	15.6
First Wis. Asset (Growth B)	15.4
Princeton Bank (Value), N.J.	14.4
Metropolitan Life (SA 43), N.Y.	13.7
John Hancock-IIA (Amp. Alpha)	13.4
First Wis. Asset (Emerg. growth)	13.1
MTrust (Growth), Texas	13.0
Meridian Invst. (Quest), Pa.	12.7
Chase-CMB (Med. cap.), N.Y.	12.6
Merus Capital (Spec. gro.), Calif.	12.6
Connecticut Nat'l Bank (Sup.)	12.5
Mellon Equity Assoc., Pa.	12.2
Comerica, Mich.	12.1
Manufacturers Detroit (Sm. cap. I)	11.9
Banc One Asset, Ohio	11.9
S&P 500	**10.7**
Russell 2000	**6.8**

1-year returns

	%
Chase-CMB (Med. cap.), N.Y.	58.9
Mutual of New York	47.9
Assoc. Bank-Neenah (Inc.)	46.1
Connecticut Bank (Sup.)	44.4
Putnam Cos. (Growth), Mass.	40.3
Meridian Invst. (Quest), Pa.	39.8
Trust Co. of the West, Calif.	38.1
Lincoln Nat'l (Opp.), Ind.	37.2
MTrust (Growth), Texas	37.0
IDS Trust (Emerg. growth F)	36.6
Wellington Trust (Spec. sit.)	36.3
First Wis. Asset. (Growth B)	36.2
The Phoenix (Growth S), Conn.	36.2
John Hancock-IIA (Amp. Alpha)	36.1
Mercantile Bank (N), Mo.	35.8
Wells Fargo (Tilts & timing), Calif.	35.6
Banc One Asset, Ohio	35.1
SLH Trust (New values 3), Del.	35.1
First City Nat'l (G-1), Texas	34.9
First Wis. Asset (Em. growth C)	34.9
S&P 500	**32.8**
Russell 2000	**21.5**

3-year returns

	%
NCNB Texas	40.4
First City Nat'l (G-1), Texas	32.5
Wellington Trust (Spec. sit.)	28.4
Connecticut Nat'l Bank (Sup.)	25.9
Mutual of New York	24.4
Equitable Capital (Tangible asset)	23.9
Putnam Cos. (Growth), Mass.	23.4
John Hancock-IIA (Amp. Alpha)	22.5
Meridian Invst. (Quest), Pa.	21.8
The Phoenix (Growth S, Conn.	21.7
Central Fidelity (Growth), Va.	21.5
SLH Trust (Small cap. 5), Del.	21.5
Society Nat'l (Central value), Ohio	21.2
Deposit Guaranty (Opp.), Miss.	21.0
Connecticut Bank (Sup.)	21.0
Massachusetts Mutual (SIA S)	20.9
Chase-CMB (Med. cap.), N.Y.	20.5
First Asset Mgmt. (II), Minn.	20.2
S&P 500	**18.6**
Russell 2000	**11.9**

5-year returns

	%
NCNB Texas	35.5
SLH Trust (Growth 2), Del.	32.3
SLH Trust (New values 3), Del.	31.4
Assoc. Bank-Neenah (Reg.)	28.0
John Hancock-IIA (Amp. Alpha)	25.9
Chase-CMB (Med. cap.), N.Y.	25.0
Assoc. Bank-Neenah (Inc.)	24.7
Connecticut Nat'l Bank (Sup.)	23.7
Meridian Invst. (Quest), Pa.	23.0
Chancellor (Value), N.Y.	22.3
Trust Co. of the West, Calif.	22.1
SLH Trust (Small cap 5), Del.	22.0
Equitable Capital (Tangible asset)	21.6
First Asset Mgmt. (20), Minn.	21.2
S&P 500	**20.3**
Russell 2000	**13.4**

10-year returns

	%
Union Bank (Sup.), Calif.	23.3
Chase-CMB (Med. cap.), N.Y.	22.0
MTrust (Growth), Texas	21.4
Prudential (Midco-sm./med. cap.)	20.8
Chancellor (Value)	19.8
S&P 500	**17.4**
Russell 2000	**15.5**

Top two deciles PIPER + special equity funds

3-month returns

	%
Fred Alger Mgmt. (Small cap.)	19.1
Wall Street Assoc. (Sm. cap. gro.)	19.1
Pacific Century (Emerg./sm. cap.)	17.9
Columbus Circle (IC plan)	15.7
Columbus Circle (Comp.)	14.5
Jundt/Capen Assoc. (Small cap.)	14.4
Columbus Circle (Rep.)	13.9
S&P 500	**10.7**
Russell 2000	**6.8**

1-year returns

	%
Fred Alger Mgmt. (Small cap.)	75.6
Wall Street Assoc. (Sm. cap. gro.)	50.3
Columbus Circle (IC plan)	44.2
Pacific Century (Emerg./sm. cap.)	43.7
Mass. Financial (Aggress.)	42.1
Columbus Circle (Rep.)	41.4
Columbus Circle (Comp.)	40.6
S&P 500	**32.8**
Russell 2000	**21.5**

Continued on page 30

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Balanced, equity funds fall short

PITTSBURGH — Median balanced funds in the Graphical Ranking of Investment Descriptors universe underperformed their benchmarks in the third quarter.

The median equity portfolio underperformed the stock market, while the median aggressive equity fund bettered it slightly. The median bond fund slightly outperformed the bond market.

The median low-equity balanced fund in the GRID universe, tracked by Yanni-Bilkey Investment Consulting, Pittsburgh, returned 3.7% in the quarter. Its benchmark — 35% of the Standard & Poor's 500 Stock Index, 50% of the Shearson Lehman Hutton Government/Corporate Bond Index and 15% of the 91-day Treasury bill return — was up 4.5%.

The median core-equity balanced fund returned 5%, while its benchmark was up 5.9%. This benchmark is 50% of the S&P 500, 40% of the Shearson Lehman Hutton Index and 10% of the T-bill.

The median high-equity balanced fund returned 6.7% and its benchmark returned 7.3%. This benchmark is 65% of the S&P 500, 30% of the bond index and 5% of the T-bill.

The median equity portfolio returned 9.7% in the quarter to the S&P 500's 10.7%. The median aggressive equity portfolio returned 11%.

The median bond fund returned 1.1%, beating the 0.9% posted by the Shearson Lehman Hutton index.

For the year ended Sept. 30, the median low-equity balanced fund returned 14.7%, lagging its benchmark's 18.1%. The median core-equity balanced fund returned 18.4% to its benchmark's 21.4%; and the median high-equity balanced fund was up 21.3%, compared with its bogey's 24.9%.

The median equity fund returned 30%, while the S&P 500 was up 32.8% for the year. The median aggressive equity fund returned 31.5%. The median bond fund returned 10.3% for the year, lagging the Shearson Lehman Hutton's 11.3%.

For the five years ended Sept. 30, the median low-equity balanced fund had a compound annual return of 14.1%, compared with its benchmark's 14.9%. The median core-equity balanced fund returned 15.3%, while its benchmark had 16.3%, and the median high-equity balanced fund returned 17.4% to its bogey's 17.7%.

The median equity portfolio had a compound annual 19%, while the S&P 500 had 20.2%. The median aggressive equity fund had 19.4%. The median bond fund returned 12.7%, closely tracking the Shearson Lehman Hutton's 12.8%. ■

Continued from page 29

3-year returns

	%
Jundt/Capen Assoc. (Small cap.)	28.8
Columbus Circle (IC plan)	25.5
First Pacific Advisors (Dallas)	24.3
Wall Street Assoc. (Sm. cap. gro.)	24.0
Pacific Century (Emerg./sm. cap.)	23.7
Putnam Cos. (Spec. growth)	23.4
S&P 500	**18.6**
Russell 2000	**11.9**

5-year returns

	%
Columbus Circle (IC plan)	28.2
Pacific Century (Emerg./sm. cap.)	26.6
Columbus Circle (Comp.)	25.6
Jundt/Capen Assoc. (Small cap.)	24.5
Putnam Cos. (Emerg. growth)	24.1
Putnam Cos. (Spec. growth)	23.7
S&P500	**20.3**
Russell 2000	**13.4**

Top two deciles PIPER + Balanced/TAA funds

3-month returns

	%
Value Line (Balanced)	11.4
J & W Seligman (Balanced)	10.9
Institutional Capital (Balanced)	10.6
Cheswick Invst. (Balanced)	10.6
Furman Selz Capital (Balanced)	9.8
Forstmann Leff (Balanced)	9.8
Fred Alger Mgmt. (Balanced)	9.4
Frontier Capital (Balanced)	9.4
Gardner and Preston Moss	8.4
Securities Counselors/Iowa (Bal.)	7.7
Chancellor (Balanced)	7.6

1-year returns

	%
J & W Seligman (Balanced)	32.3
Cheswick Invst. (Balanced)	29.4
Institutional Capital (Balanced)	29.4
QuantiLogic Asset Mgmt. (TAA)	28.5
Value Line (Balanced)	28.4
Frontier Capital (Balanced)	27.4
Bessemer Trust (Balanced)	26.3
Forstmann Leff (Balanced)	26.
Fred Alger Mgmt. (Balanced)	25.
Invst. Counselors (Balanced)	25.2
Furman Selz Capital (Balanced)	24.8

3-year returns

	%
Chancellor (Stockshift 200)	26.
Institutional Capital (Balanced)	22.8
QuantiLogic Asset Mgmt. (TAA)	21.
Invst. Counselors (Balanced)	20.4
Chancellor (Stockshift 100)	18.3
Value Line (Balanced)	17.3
Mellon Equity (Quant. strat.)	17.2
Kirr, Marbach (Balanced)	17.
Lincoln Capital (Balanced)	16.
Bessemer Trust (Balanced)	15.5

5-year returns

	%
Chancellor (Stockshift 200)	27.
Institutional Capital (Balanced)	23.3
Mellon Equity (Quant. strat.)	20.9
Chancellor (Stockshift 100)	20.3
Invst. Councelors (Balanced)	19.8
Philadelphia Invst. (Balanced)	19.5
Bessemer Trust (Balanced)	19.2
Value Line (Balanced)	19.
J & W Seligman (Balanced)	18.9

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2 set up ESOPs

Continued from page 1

on the amount of stock an ESOP had to own to take advantage of the tax benefits.

"The interest income exclusion is nice, but not essential" to encourage companies to form ESOPs, Mr. Rosen said.

With the interest exclusion essentially eliminated for most ESOPs, some observers wonder about the impact on the incentive of banks and insurance companies, the primary lenders that qualify for the favored tax treatment, to seek ESOP loans.

"The interest exclusion brought the banking community in in a big way" with ESOP loans, added David M. Binns, executive director, Employee Stock Ownership Association, Washington.

"But will they continue to promote ESOPs as aggressively as they have?"

The essential elimination of the exclusion restriction could encourage more public offerings of ESOP debt, because investment banks — non-qualified lenders — can for the most part compete on the same basis in pricing such borrowings.

To date, there hasn't been any public offering of ESOP debt, although McDonald's Corp. and Brunswick Corp. went as far as preparing filings with the Securities and Exchange Commission for such offerings earlier this year. Each company wound up using conventional ESOP financing sources of private placements and bank debt.

The ESOP measure adopted by Congress is part of a budget reconciliation bill designed to raise revenue and cut spending, and is awaiting action by President Bush.

Since the beginning of the year, some $25.7 billion in ESOPs have been financed or announced. Of that total, $24.22 billion comes from ESOPs by about 110 major companies, and $1.5 billion from ESOPs valued at less than $10 million each by an estimated 250 smaller companies.

In 1988, by contrast, $5.6 billion in ESOPs were set up by about 35 major companies.

"For public companies the most important incentive is the dividend deduction," Mr. Binns said.

"From employers' perspective, all they lost is reduced interest rate (because of the essential elimination of the interest exclusion). I don't think it will significantly curtail ESOP activity." The interest exclusion typically enabled companies to borrow at about 90% of their normal corporate interest rate.

"I think there will continue to be a significant amount of activity in ESOPs," said Louis T. Mazawey, principal and attorney with the Washington law firm of Groom & Nordberg, which represented Chevron and other companies in lobbying Congress on the issue.

Chevron's ESOP would hold roughly 5% of the company's stock.

Together with the 11% now held by an existing profit-sharing plan, the ESOP would increase such employee benefit plans' holdings to 16%.

The company plans to integrate the ESOP with the profit-sharing plan. Chevron will allocate the shares to employees in place of shares the company normally purchased each quarter on the open market.

Chevron plans to issue new shares, roughly 17 million, to sell to the ESOP and then over time repurchase the same number of shares on the market to avoid dilution.

Stephen A. McLennan, manager-investor relations, said Chevron hopes to finance the ESOP by borrowing $1 billion from banks by the end of the year. He wouldn't identify the banks.

Goldman, Sachs & Co., New York, is advising Chevron, he noted.

In addition to the ESOP, Chevron will set up a new separate capital accumulation benefit plan for non-union employees who participate in the profit-sharing plan.

Employee contributions will not be required to receive an additional company contribution of 2% of each participant's base pay. Employees then will have four options for investing the proceeds, including company stock.

Both the conversion of its profit-sharing plan to the ESOP and the new capital accumulation plan will be offered to union employees through collective bargaining.

Mr. McLennan said the creation of the ESOP was tax-driven, rather than an anti-takeover device.

"It puts additional stock in employees' hands, but it's not the primary motive," he said.

"It's a tax-driven incentive. We had a tax-advantaged ESOP several years ago that was wound up when the tax benefits went away. Our record is that when an incentive is offered, we see if we can take advantage of it."

At Dayton Hudson, executives said the company expects to proceed with its ESOP, held in abeyance since summer (*Pensions & Investment Age*, Aug. 7).

"We announced in July the intention to set up an ESOP and the board (of directors) authorized the issuance of 7 million shares of stock to the plan and the repurchase of 7 million shares of (common) stock" on the open market, said James R. Eckmann, assistant treasurer.

"It's sort of been on hold ever since because of legislative action (that was pending) in Washington. It appears that has been settled.

"It appears we will go ahead (with the ESOP) in 1990. The dividend deduction was the key."

Fred Hamacher, vice president-compensation and benefits, at Dayton Hudson, added "We had to have the dividend deduction, or it (the ESOP) was a no-go."

To avoid dilution in anticipation of the ESOP, Stephen Kowalke, director of long-term financing, said Dayton Hudson completed the purchase of 7 million shares on the open market in October.

The company would sell the ESOP preferred stock, convertible into common stock, roughly equivalent to the 7 million shares, valued at $400 million based on the recent stock price. The ESOP would hold about 10% of the company's stock.

Mr. Hamacher said Dayton Hudson plans "to pass along the majority of the tax benefits" to employees by increasing their benefits.

Dayton Hudson plans to integrate the new ESOP with its existing 401(k) plan, contributing $1 worth of company stock for every $1 an employee saves in the plan. That would represent a doubling of the current 50 cents the company contributes for every $1 an employee saves, up to 5% of wages or salary.

An employee receives no match above 5%.

Mr. Kowalke declined to identify Dayton Hudson's financial advisers for the ESOP. ■

ESOPs of $100 million or more announced in 1989

	($ millions)
Bell Atlantic	1,000
BellSouth	1,000
Chevron	1,000
Exxon	1,000
Procter & Gamble	1,000
Xerox	785
GTE	700
ITT	700
United Technologies	660
Ameritech	625
HCA Psychiatric	600
3M	550
Anheuser-Busch	500
Delta Airlines	500
Lockheed	500
Ralston Purina	500
U S West	500
Whitman	500
Southwestern Bell	455
Quantum	439
Colgate-Palmolive	411
Dayton Hudson	400
May Department Stores	400
Merrill Lynch	385
Melville	360
Sara Lee	350
Tribune	350
Boise Cascade	302
FMC	300
Upjohn	300
Armstrong World	270
PPG	252
Unisys	250
Simmons	240
Johnson Controls	233
LTV Bar	220
Houston Northwest	213
CPC	200
General Motors	200
Nalco Chemical	200
Travelers	200
Levi Strauss	190
Cooper Industries	175
Consolidated Freightways	150
Eaton	150
General Re	150
Houston Med	150
Inland Steel	150
Nu-Med	150
Quaker Oats	150
Citizens & Southern	125
McKesson	125
Square D	125
USAir	114
Walco Chemical	112
Oryx Engineering	110
St. Paul	110
Stanley Works	102
Betz Laboratories	100
Brunswick	100
Burlington Industries	100
McDonald's	100
Olin	100
Textron	100

Sources: Securities Data Corp., Newark, N.J.; National Center for Employee Ownership, Oakland, Calif.; others.

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Mobil sets ESOP debt

$800 million public issue expands plan's holdings

By Curtis Vosti

NEW YORK — Mobil Oil Corp. is offering $800 million in public debt to fund an expansion of its employee stock ownership plan, one of the first companies to tap the public markets for that reason.

Mobil decided to use public debt financing for its ESOP after Congress cut back a major tax benefit to ESOP lenders, according to company spokesman John Lord.

"The ESOP as structured had been in the planning stage for some time," Mr. Lord said.

On Nov. 22 — the same day Mobil arranged a bridge loan to finance its ESOP's purchase of a new issue of Mobil convertible preferred stock — Congress eliminated the tax deduction to lenders, except in cases where the ESOP controls more than 50% of the company's outstanding shares. That deduction lowered borrowing rates, which, in turn, made leveraged ESOPs attractive to companies.

Mobil's ESOP controls only 8% of the company after purchasing the $800 million in convertible preferred stock. The ESOP had owned about 5%.

Despite not being able to have its lenders qualify for the tax breaks, Mobil went ahead with the ESOP, using convertible preferred stock.

As to why Mobil decided to expand the ESOP, Mr. Lord said: "The company historically has always tried to fund an employee savings plan as good as or better than most."

The Mobil Oil Corp. ESOP Trust will use the proceeds of the debt issue to refinance the $800 million bridge loan it used to acquired all 102,894 shares of the Mobil convertible preferred issue. The preferred securities have a dividend yield of $6 on a stock price of 77¾, according to Paul Mazzilli, principal of Morgan Stanley & Co., and head of its ESOP group.

Morgan Stanley has been advising Mobil on the ESOP transaction for several months, according to Mr.

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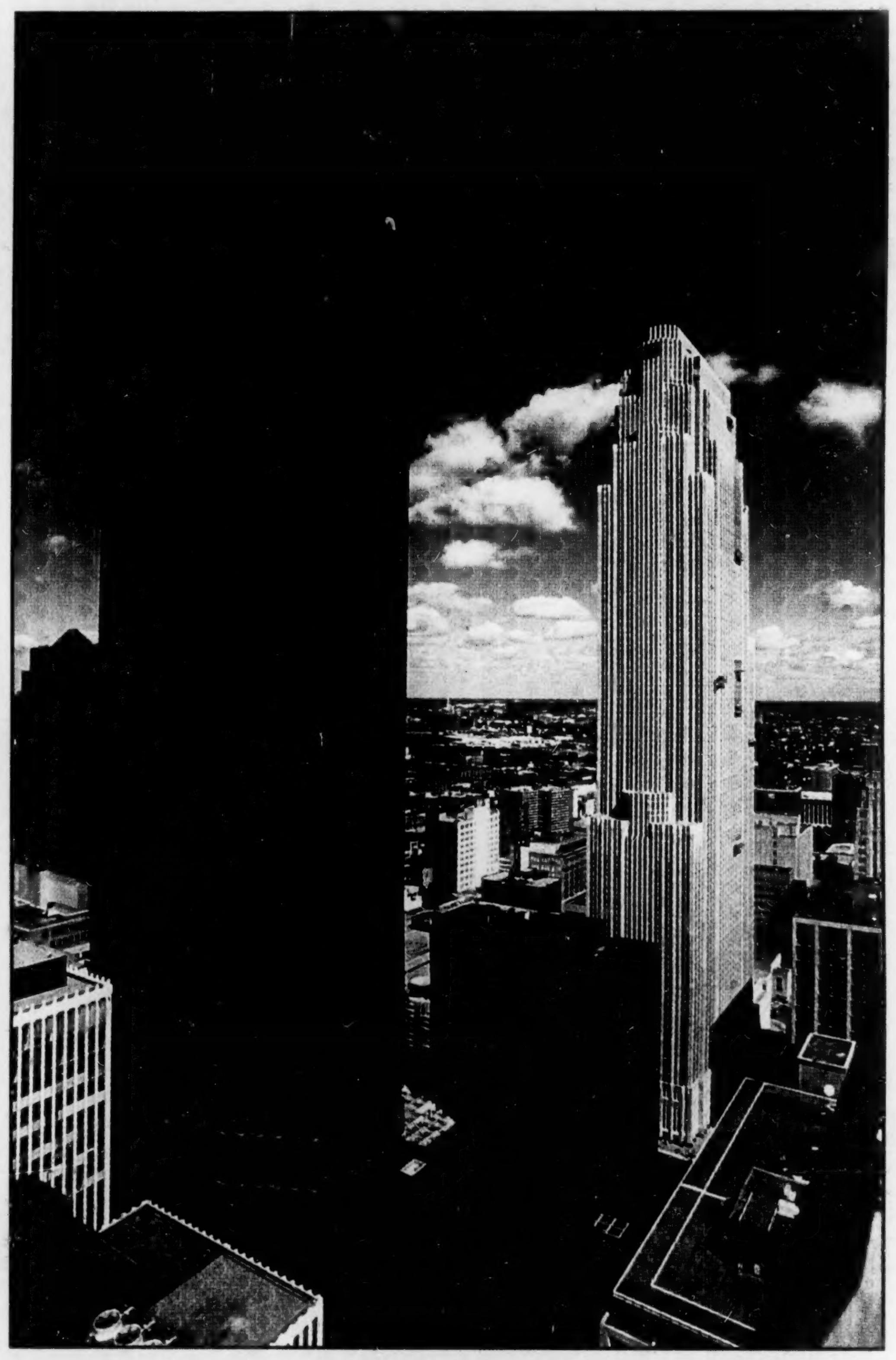
Mobil Oil is credited with being one of the first to tap the public market for ESOP financing.



The Minneapolis city employees' pension fund invested $12 million in a limited partnership aimed at revitalizing and de-leveraging struggling companies.

Minneapolis joins turnaround fund

By Trudy Ring

MINNEAPOLIS — The $900 million Minneapolis Employees' Retirement Fund has committed $12 million to a limited partnership designed to rebuild and de-leverage troubled companies.

The partnership, Red Oak Turnaround Fund, is managed by Red Oak Investment Corp., Minneapolis. It is seeking to raise a total of $60 million.

John Chenoweth, executive director and chief investment officer of the Minneapolis pension fund, said corporate revitalization funds are an attractive option to traditional venture capital and leveraged buyout investments. He is considering a commitment to a second fund but said it would be premature to identify it.

A growing number of such funds are seeking commitments from pension funds and other institutional investors (*Pensions & Investment Age*, Dec. 11).

Red Oak Turnaround

Continued on page 34

Private investment growth seen

By Mike Clowes

NEW YORK — Private investments will become a significant part of pension fund portfolios in the next decade, participants in a *Pensions & Investment Age* roundtable discussion on institutional investing in the 1990s agreed.

The panelists — W. Gordon Binns Jr., vice president and chief investment funds officer at General Motors Corp.; Steve Canter, president, Mitchell Hutchins Institutional Investors; Steve Rogers, principal, Rogers, Casey & Associates; and Brian Wruble, president and chief executive officer, Equitable Capital Management — also agreed that:

- Individual investors will continue to decline in importance in the stock market;
- Concerns about market volatility have been overdone, but structural changes in the relationship between the cash and futures markets are needed;
- Internationalization of the

Continued on page 33

Full text of the roundtable discussion — page 27.

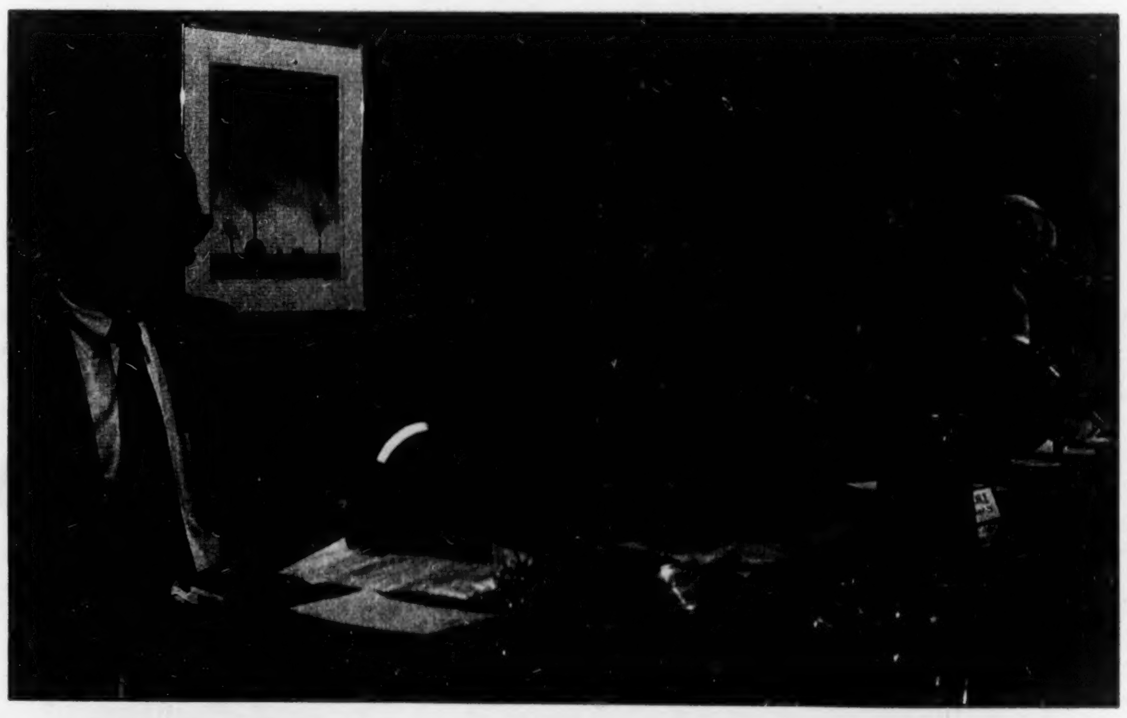


Photo by Barry Kaufman

Participants in *P&I Age*'s roundtable discussion see private investments capturing a larger share of pension fund portfolios in the next decade.

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LATE NEWS

Missouri shifts asset allocation

JEFFERSON CITY, Mo. — The $1.6 billion Missouri State Employees' Retirement System has hired a fixed-income manager and terminated an equity manager as part of a major asset allocation shift.

The fund hired Mississippi Valley Advisors Inc., St. Louis, to manage $110 million in intermediate bonds, said M. Steve Yoakum, executive director. It terminated Alliance Capital Management L.P., New York, which had run $294 million in equities. The system plans to distribute the remainder of the Alliance money among existing managers.

The system has shifted its target asset allocation to 46% equities and 54% bonds, from 57% equities, 30% bonds, 10% real estate and 3% venture capital. "We've had a pretty good run in the stocks since we became more aggressive in 1982," Mr. Yoakum said. Trustees now want to take a more conservative posture.

In real estate and venture capital, the system likely will make no new investments and let existing investments run their course.

Callan Associates Inc., Chicago, is assisting in the restructuring.

8 chosen by American Airlines

FORT WORTH, Texas — American Airlines hired five managers for its $2 billion fixed benefit fund and $1.5 billion pilot's variable pension plan.

Morgan Stanley Asset Management International, London; Templeton International, Fort Lauderdale, Fla.; and HD International, New York, each will manage international equity portfolios of $30 million to $40 million for each plan, according to William F. Quinn, president of AMR Investment Services, American's investment management subsidiary. HD International already runs a $45 million international portfolio for American's fixed benefit fund and was added as a manager for the pilot's fund, he said.

Boatman's Trust Co., St. Louis, and Ganucheau, Stupfel & Brumley, Fort Worth, will run balanced portfolios of between $30 million and $40 million each for the fixed benefit fund, said Mr. Quinn.

Mr. Quinn also announced the three managers that will run portfolios of approximately $330 million each for American's $1 billion dedicated bond fund. Barrow, Hanley, Mewhinney & Strauss Inc., Dallas; Western Asset Management Co., Pasadena, Calif.; and Goldman, Sachs Asset Management, New York, will manage the assets on a performance-based fee arrangement.

Texas fund adds to international

AUSTIN, Texas — The $23.5 billion Teacher Retirement System of Texas has expanded its international investments by placing $52.6 million in three international mutual funds.

The plan invested $19.5 million with T. Rowe Price Associates Inc.'s International Stock Fund; $19.4 million with Scudder, Stevens & Clark's International Fund; and $13.7 million with the Templeton International's Foreign Fund. Assets came from a reallocation of domestic equities managed internally.

Fort Lauderdale hires for bonds

FORT LAUDERDALE, Fla. — The $125 million Fort Lauderdale Police & Fire Retirement System selected Sovran Capital Management, Richmond, Va., to manage $20 million in fixed income, subject to fee negotiations, said Len Olivieri, plan administrator.

Funding will come from a balanced account run by INVESCO Capital Management's Coral Gables, Fla., office. INVESCO still will manage about $75 million for the system, Mr. Olivieri said. SEI Funds Evaluation Services, Atlanta, was consultant.

Fund taps balanced managers

RICHMOND, Va. — The Retail Merchants of Greater Richmond has hired Signet Asset Management and Capitoline Investment Services Inc. to run $10 million each in balanced accounts. Both firms are based in Richmond.

The assets — operating capital for the tax-exempt trade association derived from the December 1988 sale of the Credit Bureau of Richmond — will be invested mostly in fixed-income securities, with a 20% limit on equity investments, an association official said. No consultant was used.

McIlroy moves to State Street

BOSTON — Joan McIlroy has joined State Street Bank and Trust Co. as vice president-marketing.

Previously she was vice president-sales and marketing with Chancellor Capital Management, New York.

She will be marketing all of State Street's asset management products, concentrating on the upper end of the tax-exempt market.

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Retirees must dig deeper

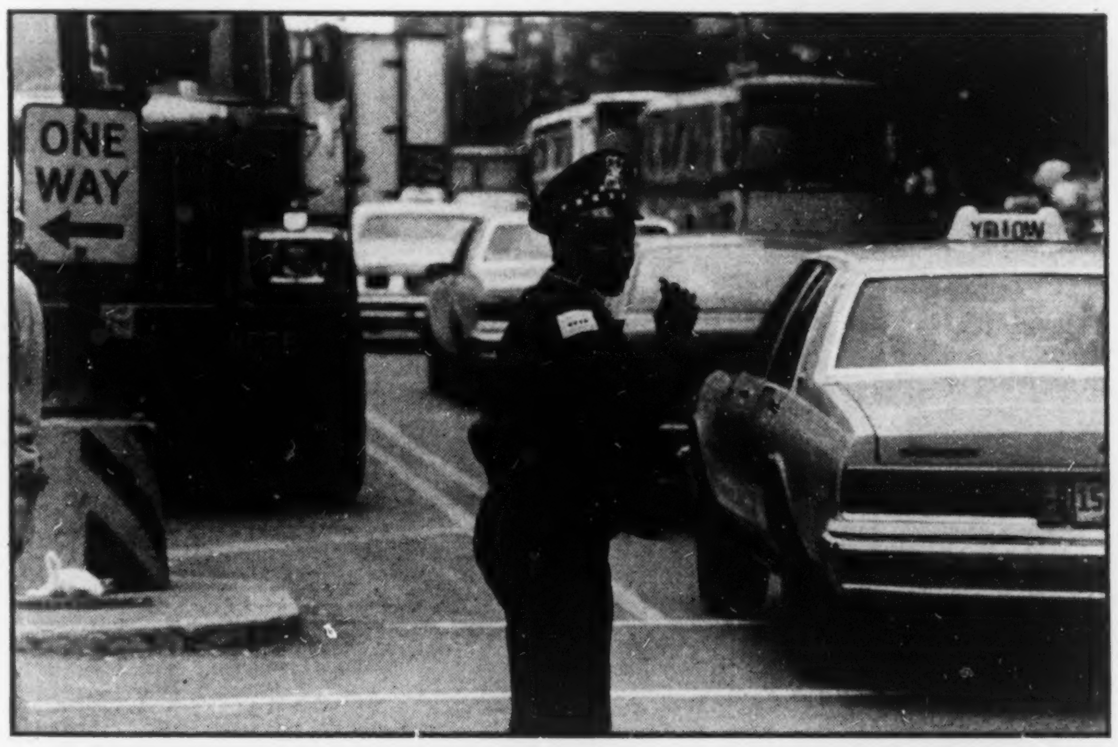
Chicago health care case promises to be first of many

By Trudy Ring

CHICAGO — Many retired Chicago city employees will pay more for health insurance under a plan approved in Cook County Circuit Court.

The plan settles a dispute between Chicago's four pension funds and the city over retiree health care coverage.

A group of beneficiaries, however, has appealed the settlement to the Illinois Appellate Court, and plans to ask that court to enjoin the city from changing the terms of any retiree's coverage from where it stood at the later of that person's retirement or the enactment of legislation paving the way for the settlement.



Most Chicago municipal employees will be paying more for retiree health care under a settlement approved in court.

Retiree health care is a growing issue for public-sector employers, as it is for corporations, benefits professionals said.

"In the next few years, it's going to be a real high-priority item for most municipalities or governmental entities," said Bill Miner, an actuary with The Wyatt Co., Chicago. The Government Accounting Standards Board will follow the Financial Accounting Standards Board in requiring employers to recognize future retiree health costs, he said.

Some groups of retirees have been able to use their political clout to persuade municipal and state employers to assume a greater share of health costs, said John P. Mackin, senior vice president at Martin E. Segal Co., New York. For instance, 20 states pay the full cost, up from 16 in 1989, he said. Also, an increasing number of states and municipalities are correlating their payments to a retiree's years of service.

Mr. Mackin said politically savvy retiree groups will continue to lobby for employers to pay more toward health care. Mr.

Continued on page 33

Court appeal not saving Grace

ERISA violation conviction stands

By Joel Chernoff

NEW YORK — Once high-flying money manager Grace Capital Inc. had its wings clipped by a federal appeals court last month, as the court found the manager violated the investment guidelines set by a former client.

The 2nd U.S. Circuit Court of Appeals knocked down almost every argument raised by New York-based Grace Capital and its president, H. David Grace. Nevertheless, the court sent the case back to a federal district court to rule on a narrow issue of whether preferred stock counts toward the 50% equity ceiling set by trustees of the now-terminated Fur Manufacturing Industry Retirement Fund, New York.

While the appeals court vacated the $1.5 million judgment set by the lower court, it appears the award will not be significantly diminished, considering preferred stock comprised only 4% of the fur trade's pension fund. Equity holdings averaged 69% of the portfolio during a 16-month period. Mr. Grace and his attorney did not return phone calls.

Grace Capital was once a highly touted boutique. Started in 1974, it developed a performance record that placed it in the top 2% of equity funds in A.G. Becker's (now SEI Corp.'s) equity fund universe for the seven years ended Dec. 31, 1981, with a compound annualized return of 21.7%. It ranked in the top 1% of the Becker equity universe in 1981, with a 28.5% return.

Assets under management soared, shooting to $100 million by early 1982 from $25 million just two years before. By January 1984, total assets had jumped to $173 million, of which $134 million were tax-exempt. Pension fund clients included the Minneapolis Employees Retirement Fund and the Daytona Beach (Fla.) Police & Fire Pension Fund.

But one year later total assets under management had plunged by $100 million. Tax-exempt assets had dropped to $32 million, and tax-exempt clients had fallen to 30 from 86 the year before, according to reports in *Pensions & Investment Age*.

By the end of 1986, total assets

Continued on page 33

TPF&C finds room to grow

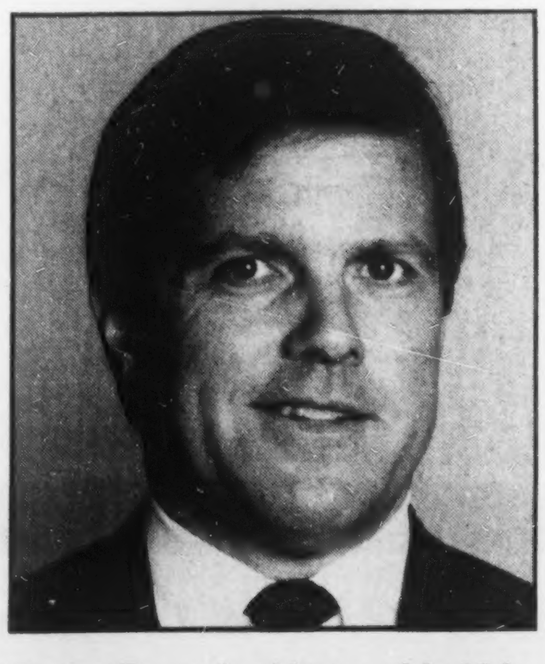
By Hillary Durgin

Launching a full-line asset consulting group when your competitors are 15 and 20 years ahead of you is no easy assignment. In 1987, when TPF&C approached 15-year veteran Roger C. Bransford, the firm tasked him to write the script for an operation that would rival those of its competitors.

While TPF&C's marquee name and roster of Fortune 500 clients effectively distances such a startup from the realm of trench warfare, these apparent benefits also pose particular challenges.

"Can anyone really create a new Frank Russell Co.?" queried William H.S. Preece Jr., who served for eight months as TPF&C's Chicago regional director of asset consulting. "Does that business have that much growth in it? My answer is no. The mainline business has been elusive for anyone that's come in late." Mr. Preece joined TPF&C after serving as director-corporate finance at Kraft Inc., Northbrook, Ill., and left the firm on good terms in May to become assistant treasurer at Motorola Inc., Schaumburg, Ill.

But for Mr. Bransford, the debut of TPF&C's new business line is perfectly timed.



Roger Bransford has guided his team over pitfalls of the asset consulting business.

"Almost the universal comment was, 'Aren't you really late?' " Mr. Bransford remarked. "We're not late; we're right on time."

He said his firm will be able to capitalize on niche opportunities in the growing global business arena and the insurance industry. Also, because his firm is new, it can use the most up-to-date technology instead of being locked into an older system.

Two years after TPF&C decided to expand its asset/liability forecasting capability into a full-line asset consulting practice, Mr. Bransford appears to have guided his newly assembled team over any initial hurdles. He has brought on a domestic staff of 29 full-time asset consultants who are working closely in four regional offices with TPF&C's field consultants. Three more domestic offices are planned.

Mr. Bransford's team has provided asset consulting services to approximately 200 clients, vs. 30

Continued on page 32

FINAL F-4
DEALER OK

An unfunded pension liability of more than $3 billion is one big reason the stock of automaker Chrysler Corp. is not likely to be snapped up by a corporate raider.

Balance sheet defense

Pension, health care liability protect Chrysler

By Margaret Price

Although its wallowing stock price has spurred takeover rumors, Chrysler Corp. could have some natural poison pills, including the company's large underfunded pension plan.

The unfunded liability of more than $3 billion "makes Chrysler less of a takeover target," said Ronald Glantz, general partner in San Francisco of Montgomery Securities. "About 18 months ago, I asked (Chrysler's Chief Financial Officer) Steven Miller about it and he said, 'It's our hidden takeover defense.' "

A spokesman for Chrysler, Highland Park, Mich., said he had no comment on any rumors or speculation about the company.

Chrysler's share price, now about $19, is just fractions away from its 52-week low and is about half of the company's current book value. This discrepancy between stock price and book value has fueled perceptions the company is undervalued — and thus should be a takeover or leveraged buy-out candidate.

But the underfunded plan and other potential off-balance sheet items, such as good will and an expected huge post-retirement health insurance cost, are deterrents to a raider.

While Chrysler's post-retirement health insurance costs are expected to be obligations in the undefined "billions," according to one analyst, Chrysler's unfunded liability at the end of 1988 came to $3.047 billion, of which only $99.5 million was recognized on the balance sheet. Data in Chrysler's annual report show good will tallied about $1.3 billion, largely connected with Chrysler's 1987 acquisition of American Motors Corp.

"At the end of 1988, Chrysler's book value was $32.58 a share," said Mr. Glantz. But if the company "had recognized the (full pension) obligation on the balance sheet, the book value would have been $19.91 a share. And on top of that is a lot of good will," he said, illustrating why he doubts Chrysler is an impending takeover candidate.

Some analysts believe an out-

Continued on page 34

Stable economy to ring-in the new decade

The new decade likely will begin with a wimper, but at least not with a recession, according to most economists surveyed by *Pensions & Investment Age*.

Of the 12 economists interviewed, only one sees a recession as almost certain to happen and another sees a 50-50 chance. The others consider recession a far more remote possibility, and most said if a recession does occur, it will be early in the year.

There appears to be a slowdown in the economy, but no recession, said Lincoln Anderson, associate director-research, at Bear, Stearns & Co., New York.

"You don't have the business cycle peak conditions," he said. Some conditions pointing away from a recession are that interest rates are not rising, inventory/sales are not high and neither household net worth nor the stock market is declining.

"The stock market generally falls in advance of a recession," he said. "The stock market's not down." The market's roughly 25% rise in 1989 will enhance household net worth, he added.

Growth in consumer spending and export activity are good signs for the economy, said Michael Daly, economist at CIGNA Investments Inc., Hartford, Conn. He also expects the Federal Reserve Board to continue easing what had been a tight-money policy. "There's nothing to push us further into a recession," he said.

David Bostian, president of Bostian Research Associates Inc., New York, begs to differ. He sees a 90% chance of a recession starting by June 30 and a 95% chance by the end of 1990.

Although the stock market does not reflect this possibility, his own macroeconomic index, based on 25 factors, shows every economic sector ready to turn down.

"Miracles can happen," he said. "But you can't always count on them. . . . The market is basically fantasizing. It's using the 'it's different this time' scenario."

Among the factors Mr. Bostian sees pointing to a recession are a downturn in manufacturing coupled with a decline in interest rates; satiated consumer demand for goods such as real estate and automobiles; low inventory/sales ratios; and a decline in military spending.

"The one thing that might help to improve the outlook would be a dramatic easing on the part of the Federal Reserve Board," he said. "My suspicion is the Fed has waited too long."

Seeing a 50-50 chance of recession in 1990 is Mickey Levy, chief economist at First Fidelity Bankcorporation, Newark, N.J. It's really too close to call, he said.

"The difference between a recession, with two consecutive declining quarters, and an expansion, with marginal growth, is only statistical noise," Mr. Levy said.

While Mr. Levy sees marginal growth in the gross national product in the new year and Mr. Bostian sees an actual decline, David Levine, chief economist at Sanford C. Bernstein & Co., New York, sees the highest growth rate, 5.3%.

Projections for the inflation rate, as measured by the Consumer Price Index, for the full year range from Mr. Anderson's 3.5% to Mr. Levine's 5.1%.

Continued moderate inflation points toward continued economic growth, said Richard S. Peterson, senior vice president and chief economist at Continental Bank, Chicago. "Surges in inflation have usually led to sharply higher interest rates, which have disrupted consumer and business spending plans," he said.

Mr. Levy is confident about inflation coming down. Decreasing product demand and increasing unit-labor costs are causing corporate profits to decline, therefore forcing managers to constrain wage increases and restructure their companies. These measures will bring down unit-labor costs and inflation, as well as stem the decline in corporate profits, he said.

Geoffrey Dennis, chief international economist for James Capel & Co., New York, agreed unit labor costs and their pressure on corporate profits are the key to low inflation. "What I worry about is when growth picks up again," he said. Then, inflation could move to between 5% and 6% quickly.

Mr. Levine projects the highest interest rates for 1990, both on 91-day and 30-year Treasury securities. In 1989, the Fed stopped tightening up on interest rates, he said. ■

This story was written by Trudy Ring with reports from Hillary Durgin and Terry Williams.

What the experts predict for 1990

	GNP		Inflation		90-day T-bills		30-year Treasuries		Chance of recession in '90	
Name/Company	1st half	Full year	1st half	Full year	June 30	Dec. 31	June 30	Dec. 1	Before June 30	By Dec. 31
Lincoln Anderson Bear Stearns & Co.	1.20%	1.8%	3.6%	3.5%	7.30%	7.00%	7.30%	7.00%	25%	30%
David Bostian Bostian Research	−1.75	−1.25	3.3	3.9	6.60	6.00	7.40	7.00	90	95
Robert Brusca Nikko Securities	1.5	2.00	3.6	3.6	7.10	7.30	7.25	8.25	30	35
Robert Chandross Lloyds Bank	1.2	1.7	3.8	4.00	7.50	7.50	7.65	7.95	25	25
Michael Daly CIGNA Investments	2.5	2.6	4.00	4.00	6.75	6.75	7.50	7.75	33	33
Robert Dederick Northern Trust	1.2	2.00	4.00	4.00	7.20	7.50	7.75	8.25	35	35
Geoffrey Dennis James Capel & Co.	1.7	2.1	4.5	4.3	7.00	7.50	7.60	8.00	30	30
David Levine Sanford C. Bernstein	4.7	5.3	5.5	5.1	8.50	9.50	9.00	10.00	5	5
Mickey Levy First Fidelity	1.00	1.3	3.5	3.6	6.25	5.60	7.50	7.10	50	50
David Littmann Manufacturers National Bank	0.4	1.2	4.2	4.2	6.80	6.60	7.50	7.65	25	20
Richard S. Peterson Continental Bank	2.2	2.3	4.2	4.3	7.30	7.40	7.75	7.75	10	10
Francis H. Schott Equitable Life	1.5	1.8	4.6	4.5	6.75	7.25	7.50	8.25	25	20

OPINION

Assessing issues for the '90s

With the end of the year approaching, pension executives ought to take a look at the major issues of 1989 and decide which are short-term phenomena and which likely will stay around much longer, requiring more attention and involvement. This brief guide may help put some of these matters in perspective.

Jointly trusteed boards: Rep. Peter Visclosky, D-Ind., plans to hold hearings in February on requiring employers to create jointly trusteed boards to oversee pension funds. His first attempt to have the measure adopted this fall lost in a House of Representatives vote. This proposal would effect every private plan, both defined benefit and defined contribution. It's a short-term phenomenon that should be settled next year, but intensive effort may be needed to head it off.

Taxing pension fund income: Sens. Nancy Kassebaum and Robert Dole, both Kansas Republicans, again are expected to advance their notion of taxing short-term investment gains of pension funds, a proposal they first introduced this year. This proposal, if enacted, would crack the door to eventual taxation of pension investment income in general, an idea that may gain more adherents as Congress looks for more money to spend. This issue could resurface as long as the budget deficit is a problem.

Hostile takeovers and leveraged buy-outs: Pension fund participation in these activities is perceived negatively in Congress. Both the Visclosky and Kassebaum-Dole measures reflect fears the takeover activity and leveraged buy-outs in this decade have been harmful to employees through lost jobs, shareholders through volatile stock market prices and corporations through burdensome leverage weakening their competitive ability. Academic studies suggest otherwise. This is a short-term concern given the current decline in leveraged buy-out activity, and the increasing pension fund interest in re-equitization investments.

Corporate governance: Shareholder involvement through proxy voting is likely to increase. Corporate pension funds largely have been inactive, allowing a small group of public and union fund counterparts to set the agendas. These more active institutions in general have advanced shareholder rights. Corporate executives need to become more involved and to clarify their independence from their corporate management. This appears to be a long-term issue.

Retiree health care: Financing this cost will remain a long-term concern, unlikely to be worked out for years. Congress appears unlikely to provide any tax assistance to fund these benefits while the deficit remains a problem. But corporations ought to continue their effort to seek the use of surplus pension assets for these costs. Even if allowed, the pension surplus would finance at most only a small part of the coverage for most corporations. Meanwhile, corporations ought to fund as best they can through such means as voluntary employee benefit associations. Corporations ought to thank the Financial Accounting Standards Board for raising the issue, even if they disagree with its proposal requiring corporations to place these obligations in their financial statements. It has forced them to recognize how out of control their promises to pay medical benefits have been.

ASIDES

Mike Clowes, *P&I Age*'s editor, pointed out on this page two issues ago that IBM's stock price has fallen so far it is now a value stock. But there's more to the IBM story. IBM Corp. no longer is the biggest company in terms of the total market value of its stock. In fact, it isn't even No. 2. In early November, IBM slipped below Exxon Corp., now the largest in market value. Shortly thereafter, IBM dropped past General Electric Co., now the second largest. At mid-December, IBM ranked third with a market capitalization of $55 billion. American Telephone & Telegraph Co., IBM's longtime rival for the market capitalization lead before the break-up of the Bell system in 1983, now ranks a close fourth.

For most of the 1980s, IBM was the largest company in terms of market capitalization. Its potential for influencing movements in the market was immense; there was a time in this decade when it represented more than 6% of the Standard & Poor's 500 Stock Index. Its dethronement marks a milestone, because its decline has had no noticeable impact on the performance of the market as a whole. In 1989, the S&P 500 is having one of its best years — total return for the first 11 months is 28.43%.

The new rankings show a leveling of the influence of all the big companies in the stock market. Exxon represents only 2.6% of the S&P 500, the smallest share for the largest company followers of the index can recall. The share for all of the big companies has fallen as well. At mid-December, the 10 largest companies in the S&P 500 index represented 18.07% of its market capitalization. At the beginning of December 1982, the top 10 had a 22.75% share. This leveling is a new phenomenon. It points to the danger of relying on one or even a few big companies.

The market value of the S&P 500 was $2.36 trillion in mid-December. In the early years of the decade, it was less than $1 trillion.

IBM's recent price of $95 is the first time the stock sold below $100 since 1984 and a nearly 50% ~~fall~~ from its peak of $175 in 1987.

Since its record high, IBM has lost nearly as much in market value as it now has; since the third quarter of this year, when IBM was still No. 1, it has lost $8.2 billion in market value.

For a long time, people said no one ever got fired for buying IBM, whether it was stock or computers. Well, no more. ■

— Barry B. Burr

Largest companies in market capitalization*

	% of S&P 500 market value
Exxon	2.74
General Electric	2.46
IBM	2.37
AT&T	2.12
Royal Dutch	1.73
Philip Morris	1.68
Merck	1.29
Du Pont	1.24
Bristol-Myers Squibb	1.23
Amoco	1.20
Top 10	**18.07**
Total S&P 500 market value	**$2.36 trillion**

*As of Dec. 14

Source: Standard & Poor's Corp., New York

LETTERS TO THE EDITOR

Quote out of context

To the Editor: I read with interest your article on the Department of Labor Inspector General (*Pensions & Investment Age*, Nov. 27).

I found the overall article of value, but was troubled by the use of a quotation attributed to me.

To put my statement in the proper context, let me note the reporter read to me a number of statements from Mr. Maria that were left out of the article and asked for a comment on the behavior of Mr. Maria.

I made my statement, which some found extreme, in response to the *P&I Age* reporter reading me the following statements by Mr. Maria:

"The failure of the Department of Labor . . . has created a window of opportunity for those who would embezzle and steal from plan participants."

"The draft report of the working group reveals a body whose uninformed views . . ."

"OIG unequivocably disagrees with these recommendations, which are not in the best interests of plan participants and beneficiaries."

"Statements which bring into question the credibility and either the motives or the competence of this working group and the full Advisory Council."

"The specious and biased reasoning of one member of the working group."

"The chairman of the working group and those who agree with him are ignoring the intent of Congress, and appear to be preoccupied with being apologists for the industry at the expense of the American worker."

In the light of these statements, I believe my own was appropriate. However, judged as presented in your article next to a most reasonable statement by Mr. Maria, it did not in fact appear to be so.

Therefore, I request that this letter be printed so your readers may be able to assess my comment in the context in which it was made.

Dallas L. Salisbury
President
Employee Benefit
Research Institute
Washington

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Manager profile statistics at a glance

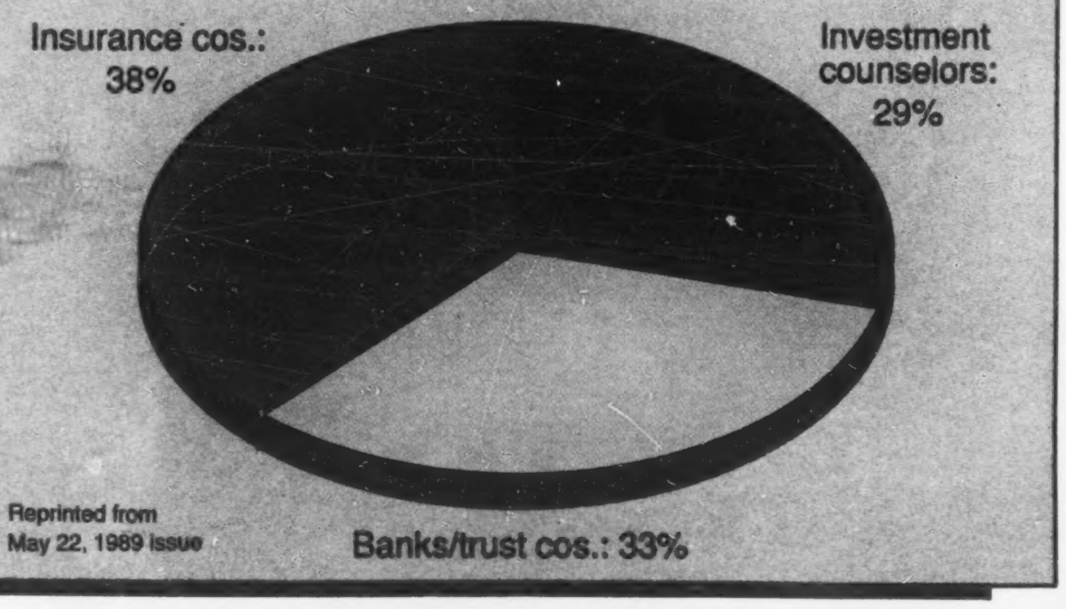
Total managers profiled	1,272
Banks, trust cos. and subsidiaries	217
Insurance cos. and subsidiaries	105
Investment counselors	899
Canadian managers*	51
Total portfolio managers employed	6,954
Total security analysts employed	7,145
Stocks watched closely (average)	
By banks	248
By insurance cos.	209
By investment counselors	230
Stocks watched generally (average)	
By banks	748
By insurance cos.	763
By investment counselors	890
Percentage of in-house research (average)	
By banks	54
By insurance cos.	60
By investment counselors	65
No. of managers using options	242
No. of managers using stock-index futures	117
No. of managers using fixed-income futures	130
Total discretionary assets managed ($ millions)	3,320,870
Top 500	3,064,324
Top 100	2,188,255
Tax-exempt discretionary assets managed ($ millions)	1,862,094
Top 500	1,831,858
Top 100	1,279,076
Tax-exempt discretionary assets managed ($ millions)	
Banks, trust cos. and subsidiaries	611,763
Insurance cos. and subsidiaries	552,549
Investment counselors	717,782
Real estate assets managed ($ millions)	187,337
Equity real estate	97,093
Mortgages	90,244
Indexed assets managed ($ millions)	178,456
Equity index	136,978
Bond index	41,478
International assets managed ($ millions)	73,023
Equity	53,351
Bonds	16,907
Cash	2,765
Assets invested in GICs ($ millions)	138,350
Assets invested for 401(k) / 457 plans ($ millions)	124,631
Assets invested in dedicated/immunized funds ($ millions)	65,222

*All other statistics exclude Canadian managers

Reprinted from May 22, 1989 issue

Who manages the money?

(the top 100)



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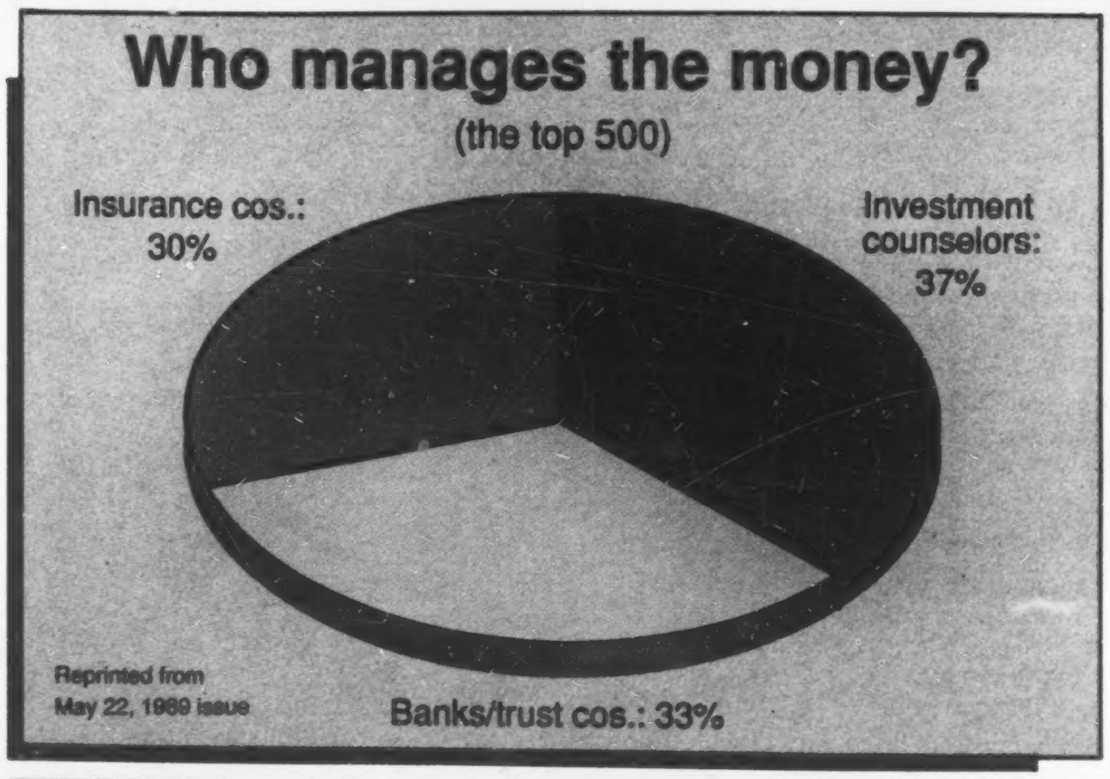
Who manages the money?

(the top 500)



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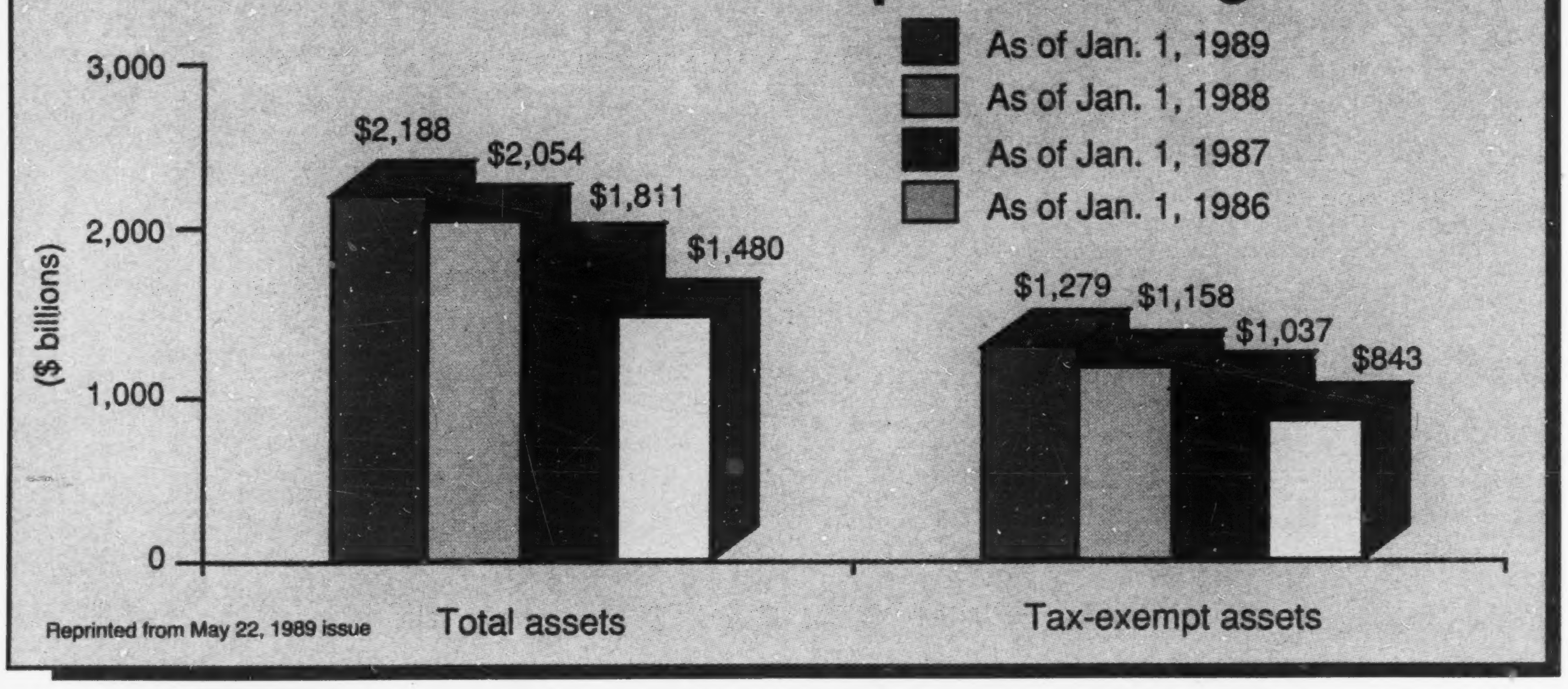
Growth in assets of Top 100 managers



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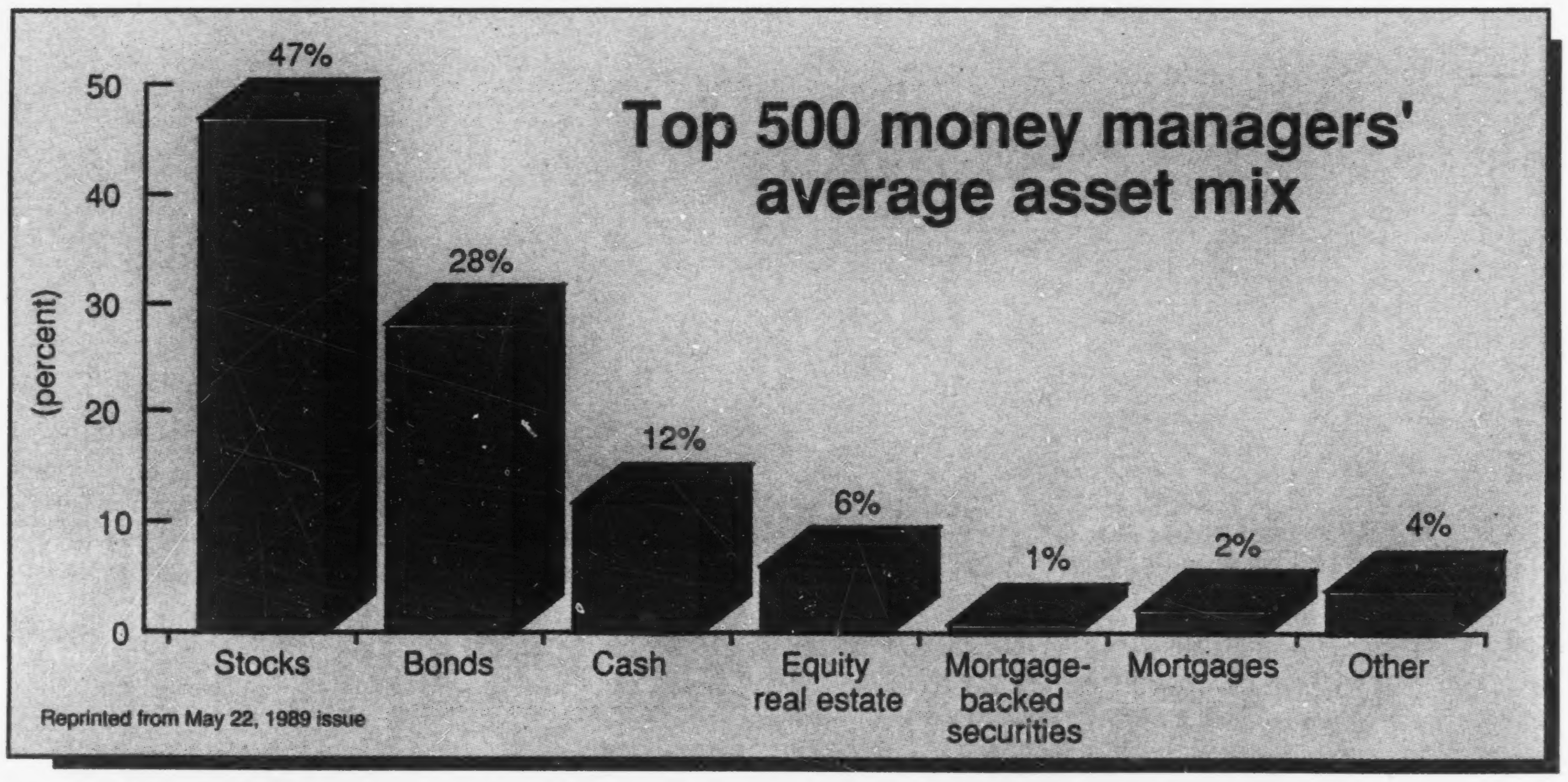
Top 500 money managers' average asset mix



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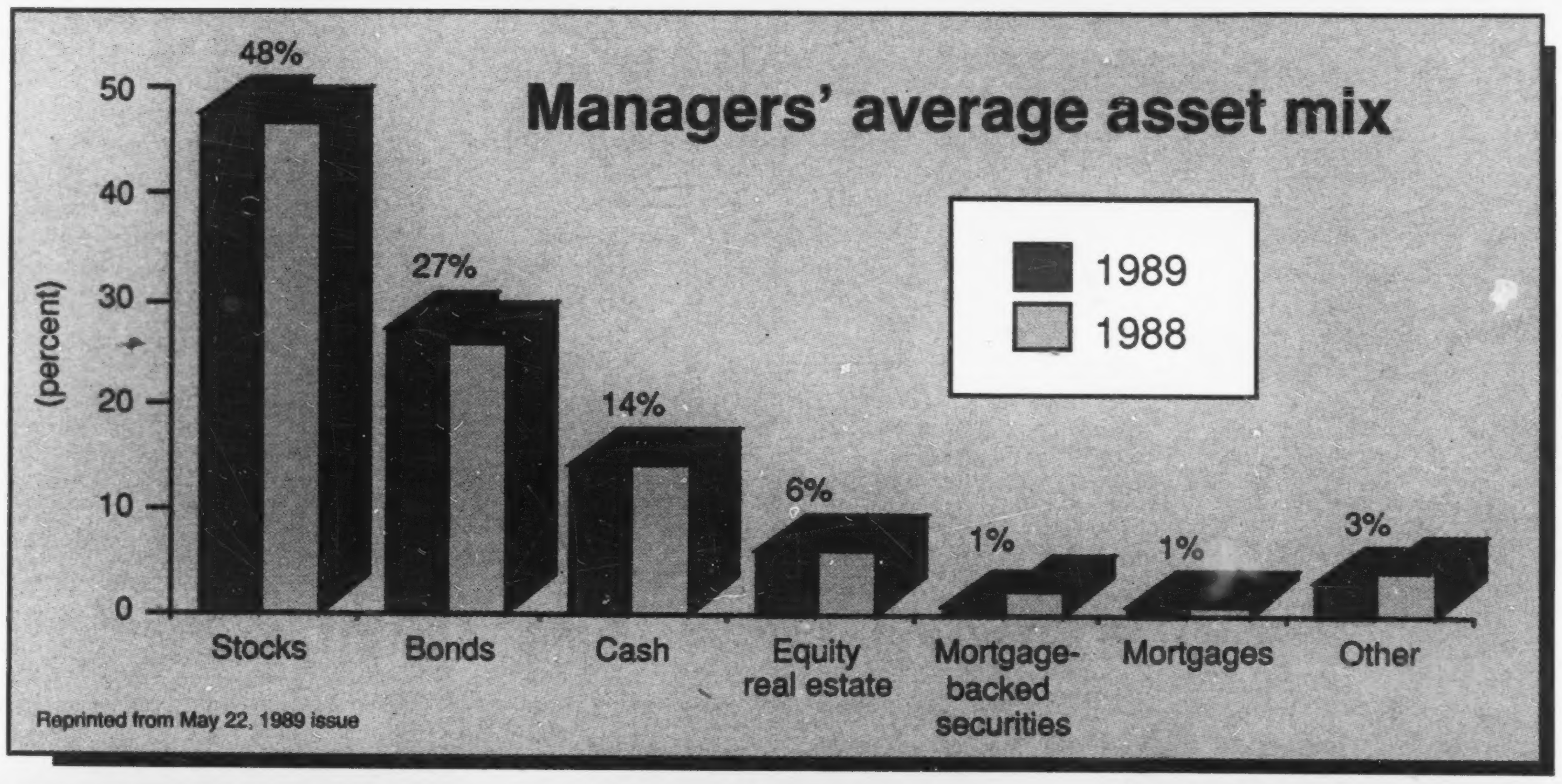
Managers' average asset mix



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[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
Lehman Mgmt.	13,079
Morgan Stanley Asset	12,069
Sanford C. Bernstein	11,094
Scudder, Stevens & Clark	10,863
T. Rowe Price	10,846
Fischer, Francis, Trees	10,610
RCM Capital	10,575
Oppenheimer Capital	10,133
Lincoln Capital	9,987
Fayez Sarofim	9,772
Lazard Freres	9,746
INVESCO Capital	9,564
Wellington	9,500
Batterymarch Financial	7,972
Criterion Investment	7,887
BEA Associates	7,469
JMB Institutional	7,400
Brown Brothers Harriman	7,131
Neuberger & Berman	6,968
TOTAL	**289,121**

* discretionary, tax-exempt assets

Reprinted from May 22, 1989 issue

[illegible]	[illegible]
[illegible]	[illegible]
Wells Fargo	[illegible]
J.P. Morgan	[illegible]
Mellon Bank	[illegible]
State Street Bank	[illegible]
Capital Guardian	[illegible]
Chase	14,800
Northern Trust	14,231
Trust Co./West	13,075
Boatmen's Trust	11,464
American Nat'l/Chicago	10,929
NCNB	10,921
First Chicago	10,594
First Fidelity	10,168
PNC	8,855
Harris Trust	8,724
Chemical Bank	8,686
Bank N.Y./Irving Trust	8,669
Fidelity Mgmt. Trust	7,451
National City	7,355
Ameritrust	7,304
First Interstate	6,477
ASB	5,811
Nat'l Bank/Detroit	5,800
First Wachovia	5,670
TOTAL	**448,049**

* discretionary, tax-exempt assets, including subsidiaries

Reprinted from May 22, 1989 issue

[illegible]	[illegible]
Prudential	[illegible]
Equitable	[illegible]
Metropolitan Life	[illegible]
Aetna Life	[illegible]
The New England	[illegible]
Travelers	[illegible]
CIGNA	[illegible]
Pacific Financial	20,455
John Hancock Financial	18,700
The Principal	16,616
New York Life	16,253
USF&G (Chancellor, Axe)	14,025
Mass. Mutual Life	10,700
VALIC	8,431
MONY Financial	7,907
Marsh/McLennan (Putnam)	7,850
Lincoln Nat'l	7,555
Transamerica Investment	6,671
Great-West Life	6,300
Mutual Benefit Life	6,003
Liberty Mutual (Stein, Roe)	5,838
Provident Nat'l Assurance	5,801
Hartford Life	4,700
Continental Assurance	4,562
Nationwide Life	4,457
TOTAL	**503,386**

* discretionary, tax-exempt assets, including subsidiaries

Reprinted from May 22, 1989 issue

U.S. managers' foreign business

How assets are invested

	$ millions
Active equity	23,385.6
Passive equity	4,403.0
Active fixed	13,111.4
Passive fixed	10.0
Balanced*	13,183.5
Real estate	8,534.0
Venture capital	228.0
Cash	3,667.2
Other	9,190.6

* assets might be double counted in equity/fixed allocations

Source of assets by client

	$ millions
Pension funds	7,785.7
Insurance companies	11,193.4
Mutual funds	5,201.7
Corporations	3,911.0
Governments	16,764.5
Banks	2,471.7
Other	10,769.0

Source of assets by country/region

	$ millions
United Kingdom	8,212.1
Japan	13,575.9
Australia	3,604.2
Europe	6,004.3
Canada	2,731.7
Middle East	13,348.0
Other	8,662.8

Reprinted from July 24, 1989 issue

Summary of 1989 proxy votes*

POISON PILL

	For	Against	Abstain
Alexander & Alexander Services	28.5%	62.3%	9.2%
American Cyanamid	28.3	63.8	7.9
Avon Products	39.9	33.2	26.9
Boise Cascade	33.7	63.4	2.9
Bristol-Myers	25.2	60.1	13.7
CSX	33	53.4	13.6
Champion International	46.8	49.2	4
Consolidated Freightways	48.3	44.5	7.2
Halliburton	35.2	51.8	13.1
Kerr-McGee	39	44.2	12.7
Polaroid	16.5	63	20.5
Squibb	33.4	52.6	14
TRW	33.3	64.4	2.3
USAir Group	48.3	48.5	3.2

SECRET BALLOT

	For	Against	Abstain
Allied Signal	25.8%	72.1%	2.1%
American Electric Power	13.8	76.4	9.8
Amoco	19.5	78.9	1.6
Avon Products	27	48.9	24.1
Boise Cascade	32.3	65.9	1.8
Caterpillar	19.8	67.5	12.7
Colgate-Palmolive	18.9	67.4	13.7
Dayton-Hudson	35.8	61.5	2.7
Dow Chemical	21.9	68.9	9.2
GTE	21.3	76.5	2.2
Gentex	15.3	57	27.7
Gillette	26.1	70.9	3
Honeywell	32.5	66.2	1.3
K mart	36.4	52.5	11.1
Lockheed	28.9	53.3	17.8
MNC Financial	12.7	79.6	7.6
McDonald's	25.1	62.7	[illegible]
Mobil	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	62	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

Top 10 equity real estate managers*

Firm	$ millions
Equitable Real Estate	9,786
JMB Institutional Realty	8,638
Copley Real Estate Advisors	7,818
Heitman Advisory	5,596
Prudential Real Estate	5,086
Aetna Life & Casualty	4,070
RREEF Funds	3,701
LaSalle Advisors	3,616
GE Investments	3,030
Yarmouth Group	2,820
Total	**54,161**

Top 10 hybrid debt managers*

Firm	$ millions
Aldrich, Eastman & Waltch	2,295
Boston Co. Real Estate	1,651
Balcor	1,515
J.P. Morgan Investment	1,307
Aetna Life & Casualty	1,152
F.I.A. Associates	1,062
Lomas Advisors	741
Alex. Brown Realty Advisors	695
Latimer & Buck Real Estate	663
TCW Realty Advisors	606
Total	**11,687**

Top 10 mortgage managers*

Firm	$ millions
McMorgan	1,100
Latimer & Buck Real Estate	637
Aldrich, Eastman & Waltch	540
L.J. Melody	421
Union Labor Life	414
Equitable Real Estate	293
Prudential Real Estate	239
Lomas Advisors	164
F.I.A. Associates	163
Citicorp Real Estate	146
Total	**4,117**

* Rankings based on tax-exempt assets

Reprinted from Oct. 2, 1989 issue

Top 50 managers ranked by combined international and global account assets

	U.S. $ mils.
1. State Street Bank	5,584
2. Capital Guardian	3,455
3. First Chicago	2,933
4. Batterymarch	2,552
5. J.P. Morgan	2,449
6. Morgan Grenfell	2,404
7. Baring Int'l	2,383
8. Templeton Int'l	2,249
9. GE Investments	2,174
10. Rowe Price-Fleming	2,115
11. Grantham, Mayo	2,111
12. Wells Fargo	1,954
13. Schroder Capital	1,900
14. WorldInvest	1,648
15. Warburg Investment	1,533
16. Nomura Capital	1,529
17. Chase Investors	1,227
18. PCM Int'l	1,217
19. Oechsle Int'l	1,084
20. TCW Global	1,012
21. Fidelity Int'l	1,000
22. N.M. Rothschild Int'l	971
23. Bankers Trust	922
24. Dimensional Fund	885
25. Boston Int'l	826
26. Alliance Capital	804
27. Scudder, Stevens	791
28. Posthorn Global	708
29. Mercator Asset*	700
30. Discount Corp./N.Y.	650
31. IDS Int'l	624
32. Julius Baer	623
33. Mellon-Pictet Int'l	580
34. Kemper-Murray	550
35. Brown Brothers*	515
36. Fiduciary Trust*	505
37. Daiwa Int'l	482
38. Arnhold/Bleichroeder	480
39. Hill Samuel/Investment	403
40. G.T. Capital	394
41. Phillippe Investment	386
42. Nikko Capital	380
43. Capital Research	360
44. Wellington Mgmt.	349
45. SBC Portfolio	342
46. Citicorp Investment	338
47. Globe Finlay	330
48. Capital Mgmt. Int'l	297
49 County NatWest*	280
50. ANB Investment	275
TOTAL	**60,263**

* as of Dec. 31, 1988

Ranking is based on U.S., institutional, discretionary, tax-exempt assets managed

Reprinted from June 26, 1989 issue

U.S. master trust/master custody banks (U.S. $ millions)

Firm	Total	[illegible]	[illegible]
State Street Bank	[illegible]	[illegible]	[illegible]
Bankers Trust	[illegible]	[illegible]	[illegible]
Northern Trust	160,000	106,000	54,000
Chase Manhattan Bank	159,200	65,100	94,100
Bank of New York	146,300	87,425	[illegible]
Boston Safe Deposit	141,439	48,526	92,913
Mellon Bank	138,225	106,396	31,829
Citibank	104,569	26,247	78,322
Manufacturers Hanover	68,300	27,300	41,000
Security Pacific	59,000	5,000	54,000
Harris Trust and Savings	48,000	45,700	2,300
First Pennsylvania Bank	38,977	4,140	34,837
NCNB Texas	36,100	23,900	12,200
First Wachovia	36,003	29,572	6,431
Nat'l Bank-Detroit	30,165	12,273	17,892
Chemical Bank	21,053	11,612	9,441
U.S. Trust	19,700	14,700	5,000
Continental Bank	18,177	13,367	4,810
C&S Trust	17,925	5,125	12,800
Ameritrust	17,753	4,399	13,354
Wilmington Trust	14,201	13,790	411
Boatmen's Trust	14,137	2,392	11,745
Bank of America	11,485	2,112	9,373
First Interstate-California	11,239	3,871	7,368
LaSalle Nat'l Bank	8,261	771	7,490
First Trust	4,461	2,917	1,544
Security Trust	4,336	679	3,657
First Wisconsin Trust	4,035	2,212	1,823
Norwest Bank Minnesota	3,800	2,700	1,100
Marshall & Ilsley Trust	3,600	1,700	1,900
Trust Co. Bank	3,435	1,312	2,123
Marine Midland Bank	3,100	1,800	1,300
Connecticut Nat'l Bank	1,732	900	832
BancOklahoma Trust	704	373	331
Bank IV	606	574	32
Bank One Indianapolis	427	253	174
First Interstate-Washington	120	120	0
Total	**1,801,232**	**944,700**	**856,532**

Reprinted from Sept. 4, 1989 issue

Top U.S. managers of foreign institutional assets

Name	$ millions
Citicorp	18,373
Chase Investors Mgmt.	6,961
CIGNA	4,080
The Capital Group	3,255
The Yarmouth Group	3,105
Morgan Stanley Asset Mgmt.	2,805
Chemical Investment Group	2,700
Alliance Capital Mgmt.	2,440
Fischer, Francis, Trees & Watts	2,200
State Street Bank & Trust	1,930
Equitable Real Estate	1,611
CIC Asset Mgmt.	1,492
Corporate Property Investors	1,350
Wells Fargo Investment Advisors	1,317
Rosenberg Institutional Equity	1,301
Equitable Capital Mgmt.	1,284
Merrill Lynch Asset Mgmt.	1,076
Manufacturers Hanover	1,060
Schroder Real Estate Associates	775
First Boston Asset Mgmt.	685
Atlanta Capital Mgmt.	499
Batterymarch Financial Mgmt.	411
Scudder, Stevens & Clark	409
Dimensional Fund Advisors	379
Dewey Square Investors	330
Fayez Sarofim	291
Bernstein-Macaulay	250
Templeton, Galbraith & Hansberger	226
Mitchell Hutchins	218
Boston Co.	167
Miller, Anderson & Sherrerd	159
Templeton Investment Counsel	142
Lazard Feres Asset Mgmt.	135
Tyndall-Newport Mgmt.	105
Columbia Mgmt.	72
RXR Capital Mgmt.	64
Burgess Capital	60
BEA Associates	58
TSA Capital Mgmt.	58
GAMCO Investors	45
Harris Trust and Savings Bank	44
Oppenheimer Capital	43
Wellington Mgmt.	43
PCM International	39
Provident Capital Mgmt.	29
Marinvest	19
Massachusetts Financial Services	13
TOTAL	**64,108**

Reprinted from July 24, 1989 issue

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AT DEADLINE

CALPERS buys complex

LOS ANGELES — The California Public Employees' Retirement System paid $200 million for the Trillium, a mixed-use complex in Woodland Hills here. Equitable Real Estate was the adviser.

Funding proposal aired

PITTSBURGH — The PBGC agreed to a proposal that would pump $110 million into six underfunded pension plans of Sharon Steel Corp.

Under the proposal, delinquent contributions to the plans will be made in full and contributions for the next four years will be guaranteed. It was worked out between the PBGC; Castle Harlan, which wants to purchase Sharon's steel operations; and Quantum Fund, a major creditor following Sharon's April 1987 bankruptcy filing.

Stock price prompts suit

PHILADELPHIA — Trustees of the Mazza Siegel Associates money purchase plan filed a lawsuit claiming the officers and directors of Braniff Inc. violated securities law by giving misleading data about Braniff's financial condition.

They claim the price of Braniff stock was inflated artificially between June 1988, when they bought the stock, and Braniff's Chapter 11 filing in September 1989.

SEI's Bullion resigns

William F. Bullion, executive vice president of SEI Corp., is calling it quits after 15 years in consulting. Al West, SEI's chairman and president, will assume his duties.

Dinkins names appointee

NEW YORK — Leressa Crocket, a Salomon Brothers vice president, was appointed commissioner of Financial Services Corp., New York's economic development arm, by Mayor David Dinkins.

INSIDE

Back to the future

Pensions & Investments moves into the '90s with a new look — and a return to an old name. *P&I* now holds more news, more commentary, more impact. Turn to page 16 for more information.

Indexing surges on foreign input

By Hillary Durgin and Terry Williams

Domestic equity indexing surged in the six months ended Nov. 30, fueled by foreign investors following their American counterparts into passive U.S. equity investing.

Total assets in domestic equity index funds climbed to $170 billion on Nov. 30 from $125.5 billion a year earlier.

Meanwhile, domestic equity index funds posted a six-month gain of 23.5%, or 13.8% when adjusted for the 9.7% return achieved by the Standard & Poor's 500 Stock Index during the period. For the previous six months, assets in domestic equity index funds had declined 6.3% on a market-adjusted basis.

Assets in domestic equity index funds increased 4.76% for the year ended Nov. 30, adjusted for market growth. (The category subtotals for the 12-month period are minus the assets of ANB Investment Management Co., Chicago, which would only provide a total asset figure this year.)

Overall, international index funds again attracted the largest percentage of tax-exempt assets during the six-month and one-year periods ended Nov. 30, gaining 54.6% and 97.9%, respectively, according to a *Pensions & Investments* survey of the largest index fund managers.

The bulk of the percentage growth in international index funds resulted from increased allocations to international bond funds, which grew 285.5% to $667 million from $173 million in six months, according to the survey.

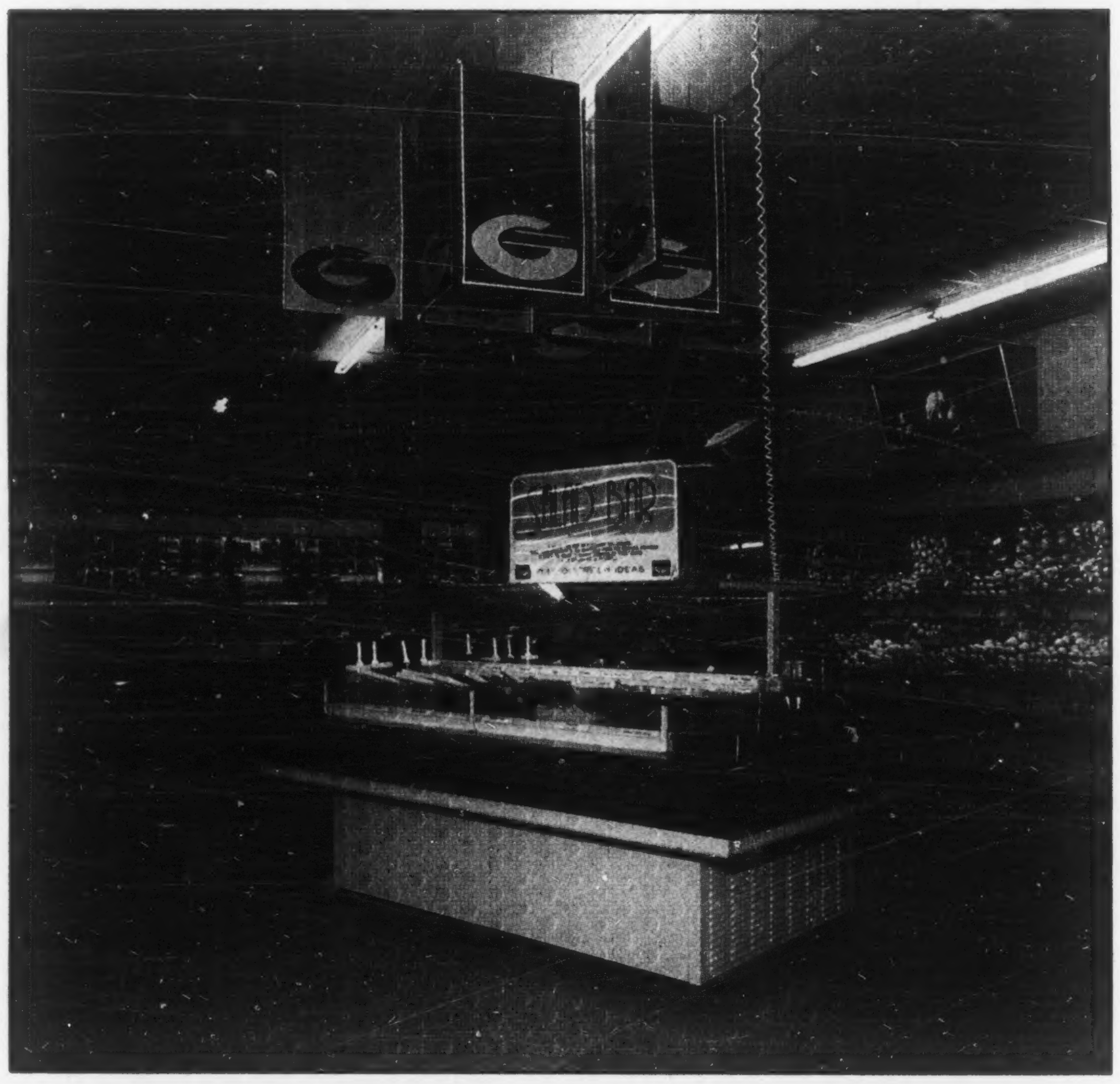
Adjusted for market appreciation, using the Salomon Brothers World Government Bond Index which posted a 6.8% return for the six- and 2.02% for the 12-month periods, international bond funds grew 278.6% and 333.8% in the respective periods.

International equity indexed assets increased to $21.196 billion as of Nov. 30 from $13.96 billion six months ago and $10.897 billion a year earlier.

Adjusted for market growth, international equity funds grew 40.25% for the six-month period and 84.4% for the one-year period, according to the survey. The Morgan Stanley Capital International Europe Australia Far East Index had returns of 11.53% and 7.45%, respectively, for the six months and year ended Nov. 30.

Domestic fixed-income index funds posted market-adjusted gains of 12.8% and 13% respectively for the six-month and one-year periods ended Nov. 30. The Shearson Lehman Hutton Government/

See **Indexing** *on page 31*



The war over Gateway created Europe's first leveraged buy-out.

'89 a big-deal year

By Marcia Parker

Spurred by a keen interest among their corporate clients in global mergers and acquisitions, buy-outs, refinancings and other restructurings, dealmakers had a busy and, in some ways, historic year in 1989.

The year saw the biggest buy-out in history and the biggest bank financing for a single deal. A precedent-setting court ruling affirmed the right of boards of directors to control the fate of the companies they help guide. Global deals soared.

A hostile bid for a British food and retail company pitted London's esteemed merchant bank, S.G. Warburg & Co., against an increasingly

See **Deals** *on page 29*

Global markets shine through in 1989's best deals — page 20.

4 companies fight votes on parachutes

By Marcia Parker

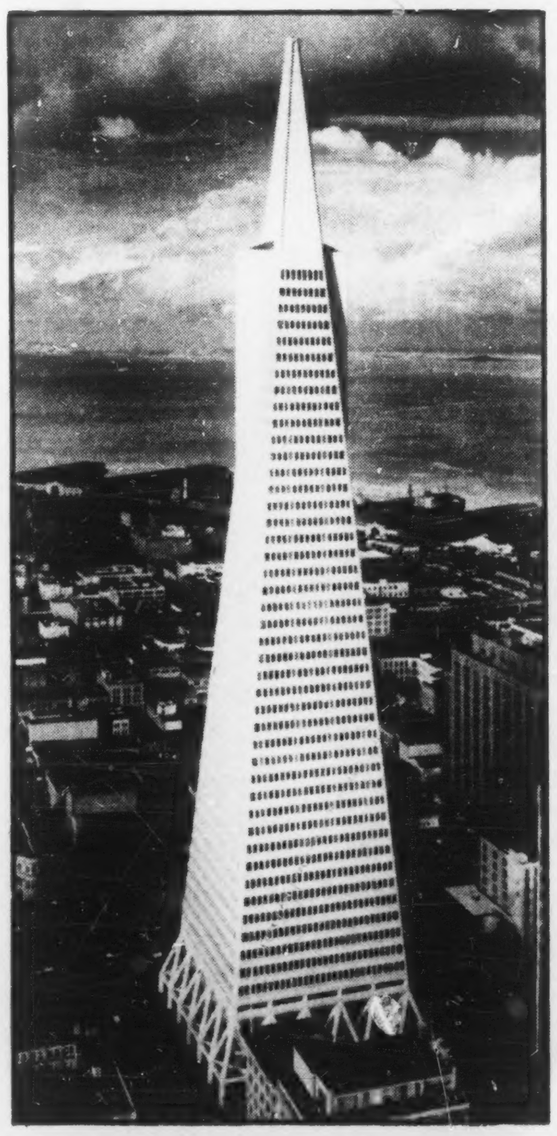
In corporate America's first challenges of 1990 shareholder resolutions, four companies have asked the Securities and Exchange Commission to allow them to exclude from the proxy statement shareholder resolutions that call for "golden parachute" severance packages to be submitted to a non-binding shareholder vote.

But the shareholders who sponsored them are fighting back.

Golden parachutes are sometimes viewed as anti-takeover devices because they provide executives with hefty — and therefore costly — compensation if they lose their jobs because of a takeover.

Transamerica Corp., Great Western Financial Corp., USX Corp. and Wendy's International Inc. are arguing the shareholder proposals dealing with severance pay sponsored by members of the shareholder activist group, United Shareholders of America, Washington, can be excluded because ordinary business items can't be the subject of shareholder proposals under SEC Rule 14a-8(c)(7). In the past the SEC has granted similar requests on those grounds.

They also argue the resolutions can be omitted because they contain false and misleading statements about the nature of the severance agreements, and imply management has acted improperly, a charge the sponsors deny. Under SEC rules, a proposal can be excluded if it violates agency rules and regulations by including false or misleading in-



Transamerica is fighting to keep golden parachutes off proxies.

See **Parachutes** *on page 31*

NEWS DIGEST

Fund offerings are set. If the Securities and Exchange Commission approves, Bell Atlantic will offer no-load equity, fixed-income and money market mutual funds to employees and retirees. Page 3.

What's hot and what's not for 1990. In a *Pensions & Investments* survey of executives of pension funds and foundations, international investing tallies lots of votes as a hot strategy in 1990, while leveraged buy-outs and other strategies get thumbs down. Page 3.

Keeping tabs on the up-and-comers. Antoine W. van Agtmael, the Dutch-born president of Emerging Markets Investors Corp., prefers to buy stocks in emerging countries, likening the opportunities present there to "a strawberry field that hasn't been picked yet." Page 15.

The merger between Warner Communications, which released the hit movie "Batman," and Time was one of *P&I*'s best deals of 1989.

FOCUS: BEST DEALS OF 1989

Deals emphasize global markets. In a year marked by many firsts in the global capital markets, *Pensions & Investments* examined hundreds of transactions to come up with the 10 best in terms of innovative structure and financing as well as market and industry impact. Page 20.

FINANCING

Records set in many areas. As many market sectors enjoyed record-setting volume, Merrill Lynch Capital Markets captured the top spot in the league table sweepstakes among investment banks, finishing first in both new domestic issues and global offerings. Page 4.

INTERNATIONAL

Big and unusual investments mark 1989. An initial plunge by the California Public Employees' pension fund makes it one of the largest international stock and bond investors, while other pension funds pursued non-traditional foreign markets. Page 2.

REAL ESTATE

Funds change purchasing habits. Trying to reduce risk in an unpredictable market, institutional investors' biggest deals last year were mainly existing portfolios and huge properties that met set criteria. Page 2.

DEPARTMENTS

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States seek pension capital

Kentucky and Maryland promoting backyard ventures

By Joel Chernoff and Trudy Ring

Kentucky and Maryland are seeking to raise money from pension funds for in-state venture capital investments.

Kentucky officials hope to raise $20 million from state pension funds and other major investors for a venture capital pool to finance new businesses in the commonwealth.

Maryland is seeking to raise between $15 million and $25 million in the coming year from state and local pension systems for a venture capital fund that will emphasize, but not limit itself to, early stage financing of Maryland companies.

To raise the capital and to manage the fund, Kentucky's Finance and Administration Cabinet has hired Massey Burch Investment Group Inc., a Nashville, Tenn.-based venture capital firm that manages more than $170 million in assets.

The firm specializes in Southeastern investments. Jack Massey, the firm's chairman, is the only individual to have founded and listed three firms on the New York Stock Exchange: Hospital Corp. of America; Kentucky Fried Chicken; and Winners Corp.

As the general partner, Massey Burch will receive a 2.5% annual management fee, plus 20% of profits after limited partners receive 125% of their committed capital.

Investment guidelines for Kentucky's Commonwealth Venture Fund are being worked out, but essentially the fund will invest up to $500,000 per company in seed capital and early stage financings.

The 12-year fund will invest in non-manufacturing companies with up to $500,000 in invested capital, and manufacturing firms with no more than $1.5 million in invested capital. Twenty percent of the fund must be invested in agribusiness.

As part of a recommendation from Massey Burch, the state will seek legislative authority to permit the fund to engage in later-stage financing for its portfolio companies.

Massey Burch officials say that, unlike much of the country where too many dollars are chasing too few deals, there is a need for venture capital in the Southeast.

"Kentucky and the Southeast are very much underinvested in venture capital," said E. Townes Duncan, vice president and principal at Massey Burch. He noted only 10% of venture capital assets are invested in the Southeast (excluding Texas), and only 2% of venture capital assets are managed by Southeastern firms.

James R. Ramsey, Kentucky's state economist and executive director of the cabinet's Office for Investment and Debt Management, said he hopes the Commonwealth Venture Fund can obtain half of its commitments by the end of January.

Massey Burch will match up to $5 million in commitments by state sources, giving the firm a strong commitment to the investments.

State officials will look to the state's two major retirement systems — the $3.2 billion Kentucky Retirement Systems and the $3.5 billion Kentucky Teachers' Retirement System, both based in

See **States** *on page 30*

1989's realty deals try to reduce risk

By Steve Hemmerick

Institutional investors initiated some multibillion-dollar, high-profile property deals in 1989, trying to take as much risk as possible out of what has been an unpredictable real estate market.

Though slow to change their habits, investors increasingly are going after either existing portfolios or mega-trophy properties within a narrowly defined range of criteria instead of making commitments for unspecified properties through commingled funds.

The biggest real estate deal of the year, of course, is the $815 million convertible mortgage by Aldrich, Eastman & Waltch Inc. on the world's tallest building, the 1,455-foot Sears Tower in Chicago. Real estate industry sources said the firm might use some of the assets in its $934 million AEW Partners Fund to provide the loan. In addition, sources said AEW might seek additional financing from individual pension fund investors.

In another deal involving pension fund money, the California Public Employees' Retirement System is negotiating to buy a 20% stake in the real estate unit of Santa Fe Pacific Corp., Chicago, for approximately $400 million. Santa Fe owns 2.8 million acres of property and 219 buildings.

Also, JMB Acquisition Partners L.P., a limited partnership put together by JMB Institutional Realty Corp., Chicago, to acquire whole companies or divisions whose assets are mainly in real estate, has purchased Randsworth Trust PLC, London, for about $800 million. Randsworth is a commercial real estate firm with 35 properties in the London area, 90% in the West End. JMB plans to sell substantial amounts of the shares of the Randsworth deal to pension fund clients.

In all three instances, pension investors were pursuing investments to meet very specific real estate objectives, and they are unlike many past pension investments in blind pools.

In blind pools, such as many commingled funds, the investment advisers only have outlines — sometimes vague — of unselected properties in which the money will be invested after it is contributed.

Partly in reaction to declining

See **Realty** *on page 29*

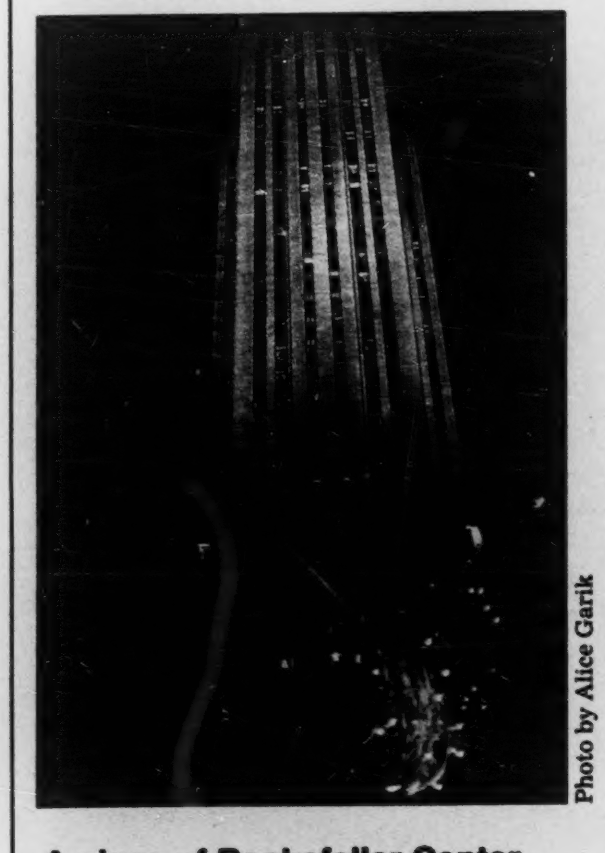


Photo by Alice Garik

A piece of Rockefeller Center was acquired by the Japanese.

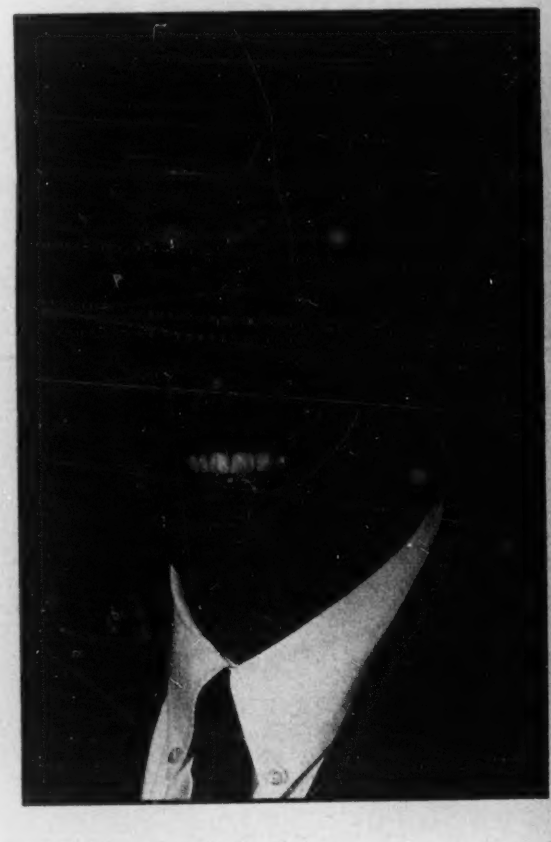


Photo by John Kennard

PRIM's Paul Quirk

International arena teems with activity

By Margaret Price

Amid 1989's surging markets, one first-time investor plowed $3 billion into international stocks and bonds, another devised a novel strategy to purchase foreign stocks and some seasoned investors pursued emerging markets, foreign venture capital and leveraged/management buy-outs.

Officials for the $54 billion California Public Employees' Retirement System last year handed out $3 billion to its first international managers, moving toward a target of 16% of assets invested internationally "probably midway through 1991," said Basil J.

See **International** *on page 30*

Bankers see record volume in many areas

By Marcia Parker

NEW YORK — Kingpin Merrill Lynch Capital Markets snared the coveted top spot among investment banks for the second year in a row, capturing No. 1 in both new domestic and global issues.

Merrill raised $45.4 billion in the U.S. new-issue market, for a 14.7% share of the $308.3 billion market. In the global arena, Merrill raised $51.9 billion, for a 9.9% share of the $525.7 billion market, according to Securities Data Co., Newark, N.J.

Yet Morgan Stanley & Co. Inc. topped all investment banks in the dollar value of deals closed in 1989. The firm advised on completed deals valued at $119.8 billion, an unprecedented yearly total. First Boston Corp. placed first in the number of deals completed (190) and first in the value of successful defenses ($28.6 billion). Goldman, Sachs & Co. led in the value of deals pending ($59 billion).

The volume of U.S. corporate new issues reached an all-time high, with 2,105 issues totaling $308.3 billion brought to market in 1989, Securities Data said.

Despite this record volume, investment bankers chased fewer deals and decreased fees. Disclosed fees suffered a drop-off of more than $850 million from 1988's level of $3.9 billion.

Issuers of common stock raised just $22.6 billion, accounting for 7.5% of the total market. But $271.5 billion worth of fixed-income securities were offered in 1989, a market buoyed by the decline in interest rates and a boom in collateralized securities.

While a sluggish U.S. economy sent the dollar to lower levels against the deutsche mark and the yen, the international market continued to rally as a record-breaking $215 billion was raised. Japanese investment banks were the big winners.

In U.S. domestic financing, Merrill Lynch was the No. 1 manager of domestic new issues, underwriting $45.4 billion. Investment-grade, straight, convertible, asset-backed and junk bonds are all areas in which Merrill enjoyed an increase in its market share and dollar volume.

A declining yield on the treasury's benchmark 30-year bond caused the straight debt market, excluding mortgage and asset-backed securities, to rally to a three-year high of $133.1 billion. The junk-bond saga and the cooling off in the mergers and acquisitions market boosted AAA-rated securities; some $21.8 billion worth were issued in 1989, the highest annual level ever.

In the junk-bond market, 1989 may be remembered as a trip to the junk yard. Falling prices coupled with forced selling by many institutions caused this market sector to experience its worst year since 1985. Dollar volume decreased to $25.3 billion, 8.8% less than 1988. The number of junk-bond offerings fell to 131 compared with 160 in 1988, 190 in 1987 and 226 in 1986. Disclosed fees fell below $900 million for the first time in four years, to $807.7 million.

Still, Drexel Burnham Lambert Inc. remained on top of the junk-bond charts. The firm underwrote $9.7 billion for a market share of 38.3%. This represents the first time the firm's year-end market share is below 40%.

Although the stock market rose more than 27% in 1989, common stock issuance plummeted to its lowest level in the past four years. This market segment raised just $22.6 billion, 24.4% less than the $29.9 billion raised in 1988, 45.4% less than 1987's $41.4 billion. The number of offerings, however, increased to 455 from 427 in 1988. Goldman, Sachs was the leader in this category, raising $3.8 billion.

Initial public offerings all but dried up in 1989. Fees totaled just $876 million compared with $1.6 billion in 1988. The dollar volume also declined significantly, to $13.7 billion, a 42.4% decrease from 1988's level of $23.8 billion.

The mortgage- and asset-backed securities market continued to sizzle in 1989, raising an unprecedented $130.8 billion.

For the second consecutive year, Goldman, Sachs was the No. 1 manager of mortgage- and asset-backed debt, underwriting $21.3 billion of these securities.

Anticipation of a single market throughout Europe in 1992 helped to stimulate the international marketplace to its greatest annual volume to date, raising $215 billion, compared with $182.5 billion in 1988. A continued trade surplus aided Japanese investment banks. Nomura Securities International Inc. led this area for the third year in a row, handling $32.8 billion.

The Eurobond market was flooded with issues valued at $1 billion or greater in 1989. Of the 14 in that category, 12 were done by Japanese issuers and had equity warrants attached. Japanese issuers accounted for 35.7% of this $205.2 billion market. In 1988, only two issues — both by the government of Italy — raised more than $1 billion.

The volume of international equities stayed on pace with last year's. Goldman, Sachs rose to the top, bringing $624.3 million to market, with each issue offering a U.S. tranche.

In the domestic merger and acquisitions arena, volume slumped in the fourth quarter, contributing to a general decline in activity for the year. 1989 produced 1,539 transactions of $10 million or greater, carrying a total value of $388.3 billion. That value represented a 32.7% decline from the $576.6 billion total for the 1,653 deals of the same value range announced during 1988.

Leveraged buy-out activity showed an equally dramatic decline. The number of announced leveraged buy-outs of U.S. targets valued at $10 million or more dropped to 161 from 235. ■

1989 underwriting rankings

(Full credit to lead manager)

All issues - global*

Firm	Volume $ mils.	Market share (%)
1. Merrill Lynch (1)	51,937.6	9.9
2. First Boston/CSFB** (2)	47,402.0	9.0
3. Goldman, Sachs (3)	47,198.2	9.0
4. Salomon Brothers (4)	36,016.2	6.9
5. Morgan Stanley (6)	35,888.7	6.8
6. Nomura Securities (8)	34,213.2	6.5
7. Shearson Lehman (5)	27,109.4	5.2
8. Prudential-Bache (10)	17,869.2	3.4
9. Drexel Burnham (7)	16,992.9	3.2
10. Daiwa Securities (11)	16,967.2	3.2

* All taxable issues, debt and equity, worldwide

** First Boston/Credit Suisse First Boston

Source: Securities Data Co., Newark, N.J.

Numbers in parentheses show the firm's 1988 ranking

All issues - domestic*

Firm	Volume $ mils.	Market share (%)
1. Merrill Lynch (1)	45,387.3	14.7
2. Goldman, Sachs (2)	42,777.6	13.9
3. First Boston (4)	37,748.8	12.2
4. Salomon Brothers (3)	32,030.7	10.4
5. Morgan Stanley (6)	28,826.8	9.3
6. Shearson Lehman (5)	25,769.9	8.4
7. Prudential-Bache (8)	17,754.8	5.8
8. Drexel Burnham (7)	16,950.1	5.5
9. Bear, Stearns (9)	16,777.1	5.4
10. Kidder, Peabody (10)	8,546.2	2.8

* All taxable issues, debt and equity, sold in U.S. only

Source: Securities Data Co., Newark, N.J.

Numbers in parentheses show the firm's 1988 ranking

All issues - domestic*

Firm	Volume $ mils.	Market share (%)
1. Merrill Lynch (1)	30,021.1	18.7
2. Morgan Stanley (7)	20,790.5	12.9
3. Goldman, Sachs (3)	19,564.3	12.2
4. Salomon Brothers (2)	18,647.8	11.6
5. First Boston (5)	17,637.0	11.0
6. Shearson Lehman (4)	15,957.8	9.9
7. Drexel Burnham (6)	11,647.0	7.3
8. Kidder, Peabody (9)	3,552.2	2.2
9. Prudential-Bache (8)	2,863.4	1.8
10. PaineWebber (11)	2,675.4	1.7

* All taxable issues, debt and equity, excluding mortgage and asset-backed debt and agency issues, sold in U.S. only

Source: Securities Data Co., Newark, N.J.

Numbers in parentheses show the firm's 1988 ranking

All debt issues

Firm	Volume $ mils.	Market share (%)
1. Merrill Lynch (2)	40,282.5	14.5
2. Goldman, Sachs (1)	38,672.0	13.9
3. First Boston (4)	35,855.2	12.9
4. Salomon Brothers (3)	31,009.4	11.2
5. Morgan Stanley (5)	27,154.8	9.8
6. Shearson Lehman (6)	21,660.0	7.8
7. Bear, Stearns (8)	16,513.8	6.0
8. Drexel Burnham (7)	16,419.7	5.9
9. Prudential-Bache (9)	15,712.3	5.7
10. Kidder, Peabody (10)	8,319.1	3.0

Source: Securities Data Co., Newark, N.J.

Numbers in parentheses show the firm's 1988 ranking

Non-investment grade debt

Firm	Volume $ mils.	Market share (%)
1. Drexel Burnham (1)	9,748.6	38.6
2. Shearson Lehman (12)	2,361.0	9.3
3. Morgan Stanley (3)	2,349.7	9.3
4. Merrill Lynch (4)	2,252.5	8.9
5. Goldman, Sachs (7)	2,195.4	8.7
6. First Boston (2)	2,014.9	8.0
7. Salomon Brothers (5)	1,508.3	6.0
8. DLJ (8)	1,308.9	5.2
9. Bear, Stearns (13)	547.0	2.2
10. Kidder, Peabody (10)	375.0	1.5

Source: Securities Data Co., Newark, N.J.

Numbers in parentheses show the firm's 1988 ranking

Mortgage and asset-backed debt

Firm	Volume $ mils.	Market share (%)
1. Goldman, Sachs (1)	21,257.9	15.7
2. First Boston (3)	18,863.3	13.9
3. Prudential-Bache (8)	14,888.3	11.0
4. Bear, Stearns (7)	14,725.5	10.9
5. Salomon Brothers (2)	12,483.2	9.2
6. Merrill Lynch (4)	12,174.0	9.0
7. Shearson Lehman (5)	8,184.5	6.0
8. Drexel Burnham (9)	5,303.1	3.9
9. Morgan Stanley (6)	5,178.5	3.8
10. Kidder, Peabody (10)	4,994.0	3.7

Source: Securities Data Co., Newark, N.J.

Numbers in parentheses show the firm's 1988 ranking

Initial public offerings

Firm	Volume $ mils.	Market share (%)
1. Goldman, Sachs (6)	2,087.9	15.0
2. Alex. Brown & Sons (7)	1,858.5	13.4
3. Prudential-Bache (3)	1,834.7	13.2
4. Merrill Lynch (1)	1,161.8	8.4
5. Shearson Lehman (2)	1,069.3	7.7
6. PaineWebber (4)	946.0	6.8
7. Wheat, First Securities (5)	903.5	6.5
8. Smith Barney (11)	655.6	4.7
9. First Boston (9)	646.0	4.6
10. Dean Witter (12)	540.0	3.9

Source: Securities Data Co., Newark, N.J.

Numbers in parentheses show the firm's 1988 ranking

Common stock

Firm	Volume $ mils.	Market share (%)
1. Goldman, Sachs (5)	3,786.8	16.5
2. Merrill Lynch (1)	2,591.8	11.3
3. Alex. Brown & Sons (8)	2,384.8	10.4
4. Prudential-Bache (3)	1,937.5	8.5
5. Shearson Lehman (2)	1,758.0	7.7
6. PaineWebber (4)	1,434.5	6.3
7. Morgan Stanley (13)	1,157.0	5.1
8. Wheat, First Securities (6)	947.7	4.1
9. First Boston (10)	922.9	4.0
10. Dean Witter (12)	802.0	3.5

Source: Securities Data Co., Newark, N.J.

Numbers in parentheses show the firm's 1988 ranking

Preferred stock

Firm	Volume $ mils.	Market share (%)
1. Merrill Lynch (1)	2,513.1	32.8
2. Shearson Lehman (2)	2,041.5	26.6
3. First Boston (3)	970.6	12.7
4. Morgan Stanley (7)	525.0	6.8
5. Salomon Brothers (6)	494.0	6.4
6. Smith Barney (9)	320.0	4.2
7. Goldman, Sachs (4)	319.0	4.2
8. Lazard Freres (NA)	120.0	1.6
9. Prudential-Bache (14)	105.0	1.4
10. PaineWebber (NA)	60.0	0.8

Source: Securities Data Co., Newark, N.J.

Numbers in parentheses show the firm's 1988 ranking

ESOPS

Sears gets its money's worth during 1989

■ What a year it was for Sears.

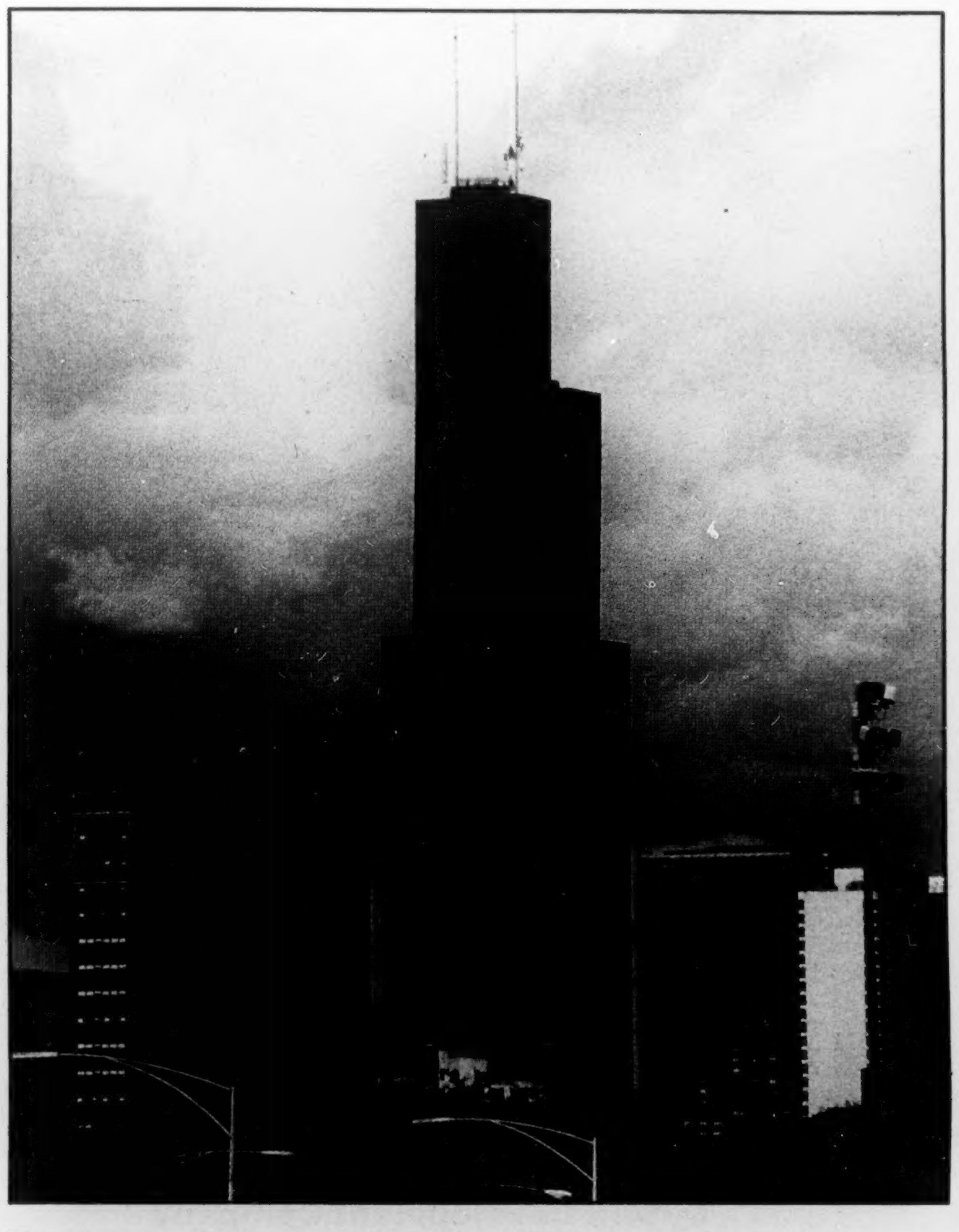
Without seeming to catch their breath, Sears executives tacked the creation of an $800 million ESOP onto a calendar that already held the implementation of the company's vastly reworked retailing strategy, the announcement of a corporate move and the subsequent effort to sell the landmark headquarters tower.

The latest move, announced Dec. 21, will involve the purchase of $800 million of the company's shares, which recently were selling at 37¾, to set up an employee stock ownership plan.

With the establishment of the ESOP, employee ownership will rise to about 21% of the company from 15%.

Sears' plan will rank among the 10 largest formed during the past year. Five companies — Bell Atlantic, BellSouth, Chevron, Exxon and Procter & Gamble — all set up ESOPs of $1 billion.

Sears joins Mobil Oil as having the second-largest plans at $800 million.



The attempted sale of the Sears Tower was one of the major projects that kept company executives busy in 1989.

PEOPLE

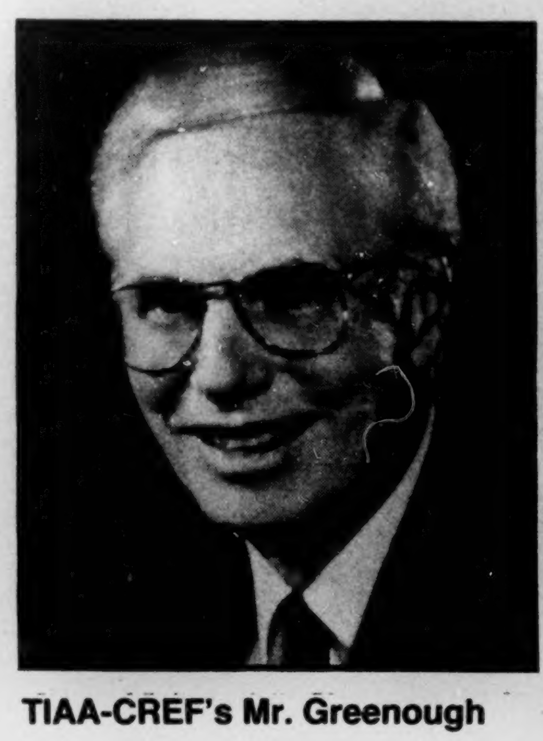
TIAA-CREF pioneer dies

■ William C. Greenough, past president, chairman and chief executive officer of TIAA-CREF, the nation's largest pension fund, died Dec. 20 of complications from a heart attack. He was 75.

During his 38-year tenure, Mr. Greenough pioneered the variable-annuity stock fund concept, which led to the creation of the College Retirement Equities Fund to complement the Teachers Insurance and Annuity Association. He retired in 1979.

"Few people get the chance to play such a pivotal role in such an important field," said economist Paul Samuelson, who roomed with Dr. Greenough in Harvard's graduate school.

Mr. Greenough also was active in public policy issues.



TIAA-CREF's Mr. Greenough

In 1979, he was appointed to Jimmy Carter's Commission on Pension Policy, and served as chairman of the Committee for Economic Development's Subcommittee on Reforming Retirement Policies.

FINANCING

Banks expand U.S. activities

■ Two European banks, France's Credit Lyonnais and Switzerland's Swiss Bank Corp., are expanding or restructuring their investment banking operations in the United States.

C.L. GlobalPartners, the U.S. investment banking subsidiary of Credit Lyonnais, has a small operation based in New York but has not made major inroads in developing new business in the corporate finance and merchant banking arenas.

In an effort to bolster that effort and help the firm make its mark, C.L. GlobalPartners hired four leading Wall Street professionals. Joining the firm as senior managing director is Patrick Kealy, formerly a senior vice president at Oppenheimer & Co. John A. Mendelson, who was formerly head of market analysis at Dean Witter Reynolds, was named exclusive consultant and market strategist. Frank Calta was named senior vice president and director of U.S. trading, and John Dockendorff, senior vice president for institutional sales. The two men held similar posts at Dean Witter Reynolds.

Swiss Bank Corp. has set up a new merchant banking group in New York, composed of six divisions headed by Joel Stewart, a senior vice president. The group includes corporate banking, real estate financing, structured finance, regional offices and credit monitoring and control.

CASH MANAGEMENT

Winds of change stir cash execs

■ More than 40% of the companies that have made changes in their cash management operations have instituted programs to review cash management service costs, a Greenwich Associates survey shows.

According to the survey, 20% of the companies made at least one of the following changes:

- Increased the number of cash management services used.
- Dropped a cash management banking service.
- Switched to fees from compensating balances.
- Added a bank for cash management services.
- Started using a microcomputer for cash operations.

INVESTING

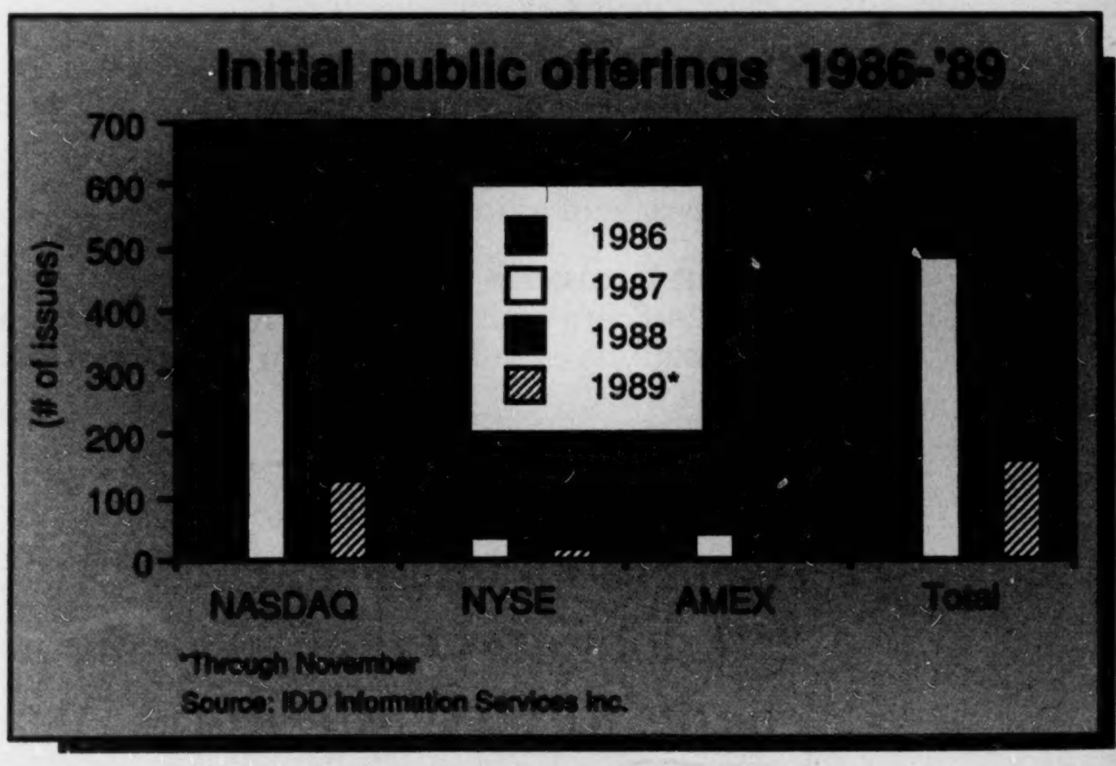
Touts for State Street

■ The folks at State Street Bank & Trust Co. have plenty to brag about these days.

First, Value Line touted the stock of its parent — State Street Boston Corp. — in a Dec. 15 report. Then, in the Jan. 8 issue of Forbes, State Street was ranked 17th on a list of the 25 best-performing stocks of the 1980s.

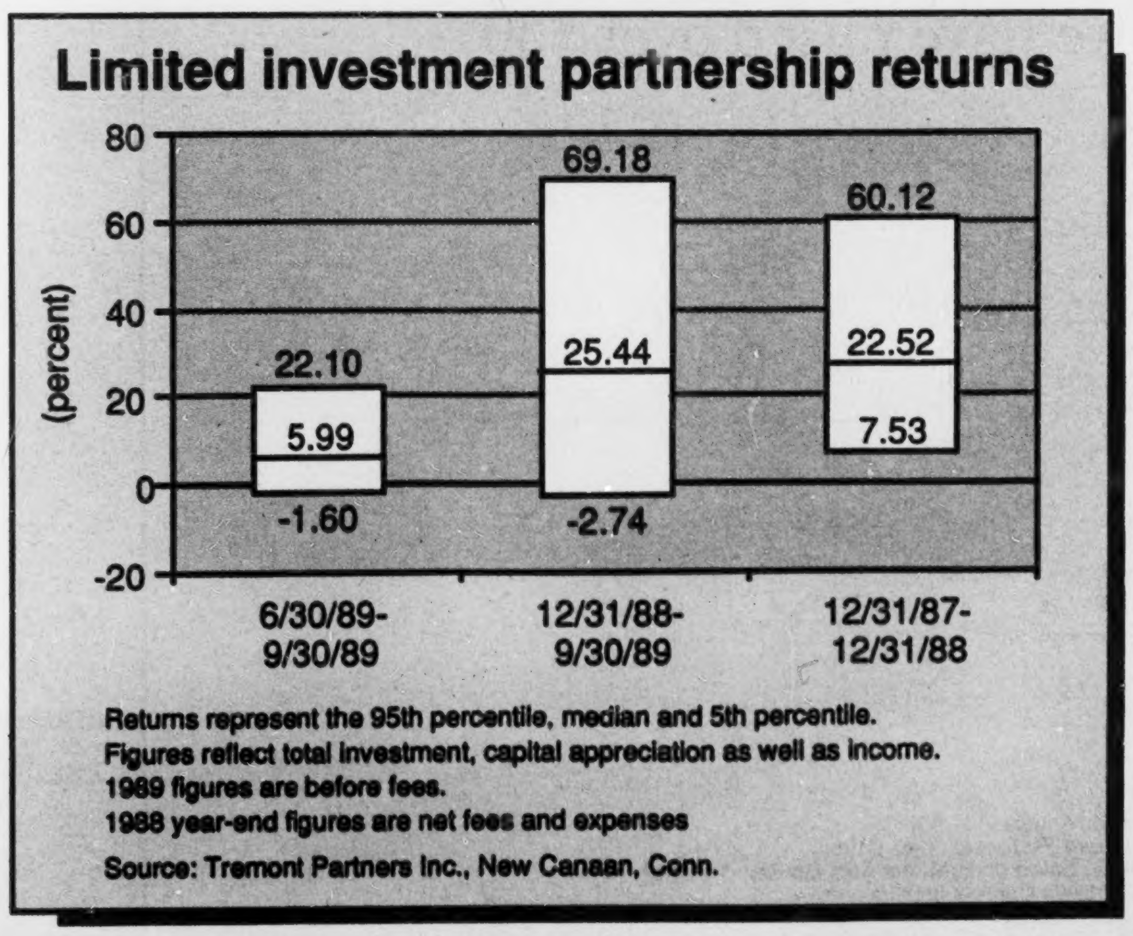
The Value Line recommendation is particularly heady: "The list of . . . opportunities for this financial services disseminator of the Nineties is long, and prospects for capitalizing on them are better defined than for any growth company to come along in recent memory," Value Line's William Acheson wrote.

State Street Bank, he said, is the "recognized leader" and most likely to benefit from consolidation in the industry providing services to "megafunds." Among the bank's strengths are its global presence, master trust operations and money management business.



*Through November

Source: IDD Information Services Inc.



Returns represent the 95th percentile, median and 5th percentile.
Figures reflect total investment, capital appreciation as well as income.
1989 figures are before fees.
1988 year-end figures are net fees and expenses

Source: Tremont Partners Inc., New Canaan, Conn.

REAL ESTATE

Karsten assumes problem portfolio

■ The New York State & Local Retirement Systems has turned over to Karsten Realty Advisors, Los Angeles, a $185 million portfolio of troubled real estate and mortgages previously managed by Eastdil Realty Inc., New York.

Eastdil had run the portfolio — it didn't buy the properties or make the mortgages — since November 1986, but chose not to bid on the contract when it came up for renewal last fall, said Robert Hinckley, a spokesman in the New York State Comptroller's office.

Carl Mayer Jr., principal with Karsten, said a few of the properties are on a watch list and, in a few cases, the borrowers, not the properties, are having problems.

PEOPLE

Chase promotes Zecher

■ J. Richard Zecher has been named chairman of Chase Investors Management Corp., and will be splitting his time between CIMC and Chase Manhattan Bank's global risk management area. Previously he was president of CIMC.

Some of his Chase Investors responsibilities will be assumed by Howard A. Scribner Jr., now vice chairman and chief operating officer of CIMC, which manages $32 billion in assets.

Mr. Zecher's assumption of responsibilities in the risk management area, which includes foreign exchange operations and commodity swaps, follows the resignation of Richard L. Huber, executive vice president in charge of the bank's securities business.

Mr. Zecher said he had taken on the risk management responsibilities on the condition that he could remain chairman at CIMC and retain his half-dozen client relationships. He said Mr. Scribner, who helped design Chase Investors Management in 1972, would be in charge of the day-to-day operations.

Indexing

Continued from page 1

Corporate Bond Index returned 7.8% and 14.4% for the respective periods.

As of Nov. 30, assets in domestic bond indexes increased to $59.7 billion from $49.8 billion six months ago and $46.9 billion a year earlier.

Index fund managers expect the growth in international index funds to continue.

"On a percentage basis, U.S. indexed equity assets continue to grow," said Patricia Dunn, president of Wells Fargo Investment Advisors, San Francisco.

"What we see on the horizon is definitely international index funds."

International indexing has become popular among institutional investors for two reasons, Ms. Dunn said. "Pension funds are increasing in general their long-term policy allocation to international asset classes," she said. In addition, "the performance of active managers outside the United States has been very disappointing."

Wells Fargo had $4.035 billion in international equity index funds as of Nov. 30, up 33.6% from $3.021 billion as of May 31. The firm had $50.279 billion in domestic equity index funds, up 32.8% from $37.865 billion May 31. Wells Fargo also retained its position as the largest index fund manager, with $75.718 billion overall.

While many U.S. companies are looking overseas for increased diversification and reduced risk, foreign investors are turning to U.S. domestic equity indexes for many of the same reasons.

Wells Fargo now has more than $7 billion in assets invested for non-U.S. clients, Ms. Dunn said.

Nicholas Lopardo, a senior vice president with State Street Bank & Trust Co., Boston, reported that of his company's 120 index clients, 25% are foreigners, compared with 10% last year.

And interest by non-U.S. companies in domestic equity indexes has increased to the point that at Prudential Asset Management Group, Newark, N.J., this growth has canceled out the predominant interest the firm had seen previously in international indexing, said Dave Hurley, vice president.

"A little while ago I would have said foreign was growing much more dramatically because of the U.S. interest in foreign equities in general," he said. Now, he said, this has been somewhat balanced by foreign investors' interest in the United States.

"I think there's a lot of interest by foreign companies in U.S. indexed equities."

At Prudential, which has a total of $2.162 billion in indexed assets, indexed international equity assets have grown to $269 million as of Nov. 30, up 3.1% from $261 million as of May 31. Indexed domestic equities grew 29.1% to $900 million from $697 million in the same period.

Many money managers noted a move toward specialized indexes in both international and domestic index investments.

Specialized indexing is a hot growth area in international investing, focusing on such areas as small-capitalization, emerging markets and regional country funds, said Philip Leonardi, marketing director at Travelers Investment Management Co., Hartford, Conn.

TIMCO had $967 million in indexed assets as of Nov. 30. International equity indexed assets grew to $270 million, up 38.5% from $195 million as of May 31. Indexed domestic equities grew 25.4% to $410 million from $327 million in the same period. ■

Leading index fund managers

($ millions - as of Nov. 30)

Company	Total	Domestic equity	Domestic fixed	Int'l equity	Int'l fixed
Wells Fargo	75,718	50,279	21,323	4,035	81
Bankers Trust	40,800	35,500	3,300	2,000	0
State Street Bank	27,504	16,064	2,523	8,801	116
Mellon Capital	26,760	21,940	4,220	600	0
ANB Investment	10,500	na	na	na	na
Alliance	8,350	7,300	250	800	0
Boston Co.	7,097	4,058	2,711	328	0
Mellon Bond	6,500	0	6,500	0	0
GE Investment*	6,000	6,000	0	0	0
Dimensional Fund	5,500	4,000	700	800	0
Manufacturer's Nat'l/Detroit	4,266	4,240	26	0	0
Lincoln Capital	4,200	0	4,200	0	0
T. Rowe Price	3,625	295	3,120	0	210
Wilshire	3,570	3,570	0	0	0
Chase Investors*	3,400	1,600	500	1,300	0
Vanguard	2,412	2,276	136	0	0
Prudential	2,162	900	993	269	0
Sears	2,085	1,900	0	185	0
Fidelity	2,038	665	655	718	0
Lehman Mgmt.	1,903	0	1,903	0	0
BEA Associates	1,620	1,160	460	0	0
Chancellor Capital	1,432	1,350	82	0	0
Northern Trust	1,299	1,172	72	37	18
Security Capital	1,275	0	1,225	0	50
Putnam	1,181	0	1,181	0	0
Mitchell Hutchins	984	395	589	0	0
Travelers	967	410	97	270	190
Axe Core	789	511	0	278	0
Aetna	747	650	97	0	0
NCNB Texas	729	700	29	0	0
Boston Int'l	721	0	0	721	0
WR Lazard	721	0	721	0	0
Harris Trust	570	390	180	0	0
Capstone Asset	500	500	0	0	0
ASB Capital Mgmt.	500	500	0	0	0
First Wisconsin	459	103	350	4	2
Boatmen's	425	400	25	0	0
Fiduciary Trust	400	0	400	0	0
Monitor Capital	298	102	146	50	0
Associated Capital	296	246	50	0	0
Bear, Stearns	280	0	280	0	0
Todd Investment	255	0	255	0	0
NBD Bancorp	220	220	0	0	0
Western Asset	204	0	204	0	0
RXR Group	198	49	149	0	0
Metropolitan Life	163	163	0	0	0
Advanced Investment	160	160	0	0	0
Clifton	158	89	69	0	0
Old Kent Bank	150	150	0	0	0
Total	**262,091**	**170,007**	**59,721**	**21,196**	**667**

*As of Sept. 30

Parachutes

Continued from page 1

formation.

Many activist institutional investors believe it is time for a revision. They believe the rule too often is used as a catch-all by companies seeking to keep shareholder proposals off the proxy, a charge companies deny.

Members of USA have sponsored the golden parachute proposals at seven other companies: Champion International, Consolidated Freightways Inc., Crane Co., Eastman Kodak Co., Mellon Bank, Pittston Co. and Primerica Corp.

The resolution itself is simple. It says no compensation will be paid to any director, officer or employee of the company that is contingent upon the merger or acquisition of the corporation. A supporting statement accompanying the Transamerica shareholder resolution calls a golden parachute "an egregious example of management draining the corporate treasury at the stockholders' expense for their own private benefit."

USA helped draft a response to the SEC for its member-sponsors to counter the companies' challenges.

Emil Rossi, a USA member and the Transamerica shareholder who sponsored the golden parachute resolution, told the SEC in a letter he is alarmed that managers of public companies like Transamerica "are able to gain this personal protection from accountability to shareholders. Golden parachutes create financial incentives for corporate managers that are at odds with their fiduciary duties to shareholders. Ensuring managers that they'll suffer no personal loss of income from a takeover or other change of corporate control — indeed that they may well stand to gain handsomely — could discourage management from fulfilling its responsibility to operate the company in the shareholders' best interests."

USA is getting some support from Institutional Shareholder Services Inc., a Washington consulting firm. ISS has asked the SEC to reconsider its position, saying: "We think shareholders should be allowed to exercise direct oversight of golden parachutes."

A decision by the SEC is expected sometime this month in the Transamerica case.

In a letter to the SEC, Karen Stevenson, Transamerica's vice president-law, said the agency has long held the view that proposals concerning executive compensation relate to the ordinary business operations of a company. She made a lengthy case for why the board of directors and no one else should have the right to fix executive compensation.

"In order to attract and retain the highest quality of executives, a corporation must provide total compensation satisfactory to each such executive. Because of the rising takeover activity of recent years, executives increasingly have required that their compensation reflect the employment uncertainty caused by a possible change in control," Ms. Stevenson said.

"It is unreasonable to expect stockholders meaningfully and efficiently to evaluate the numerous issues involved with reviewing termination contracts because such a review is inextricably related to the ordinary business of a corporation."

Ms. Stevenson also said if stockholders voiced a negative opinion with respect to termination compensation, it would put the board of directors in the position of either adopting a position they don't agree with or risking a confrontation with stockholders. ■

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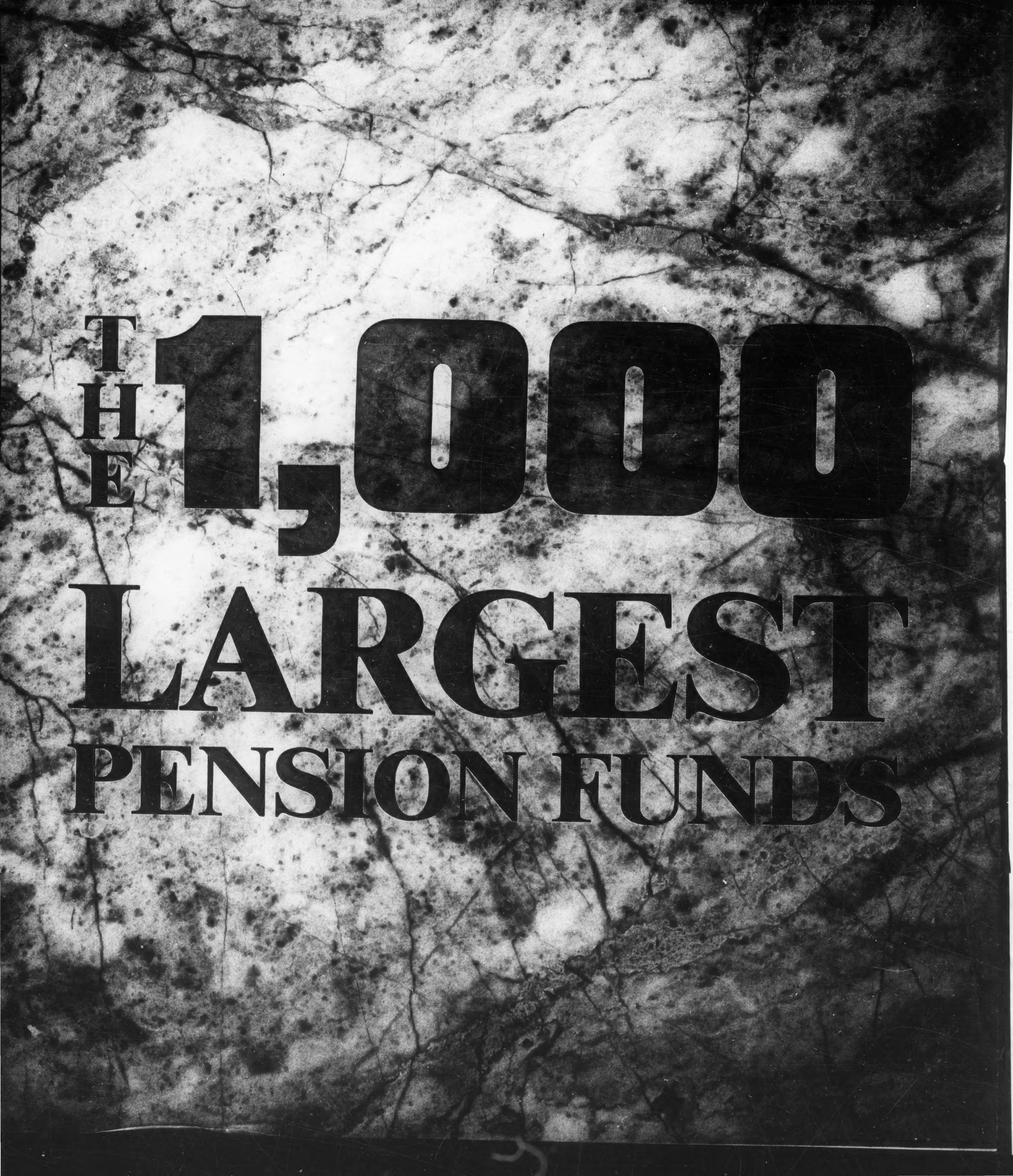

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January 22, 1990

Pensions&Investments

The Newspaper of Corporate and Institutional Investing

$8 An Issue / $127 A Year

AT DEADLINE

Transamerica loses bid

In a major policy change, the SEC rejected efforts by Transamerica to keep shareholders from voting on "golden parachute" severance agreements.

Transamerica and three other companies had asked the SEC to allow them to exclude — under the ordinary business rule — 1990 proxy resolutions sponsored by stockholders that call for golden parachutes to be submitted to a shareholder vote.

United Shareholders Association, Washington, which helped draft the Transamerica shareholder resolution, called the SEC decision a "major victory for shareholders."

California selects 7

The $57 billion California Public Employees' Retirement System hired, subject to fee negotiations, three new firms, retained four current managers and dropped five for domestic equity.

The seven will run a total of $4 billion to $5 billion; specific allocations haven't been decided.

Newly hired were Trust Co. of the West, Oppenheimer Capital and State Street Bank and Trust.

Retained by the fund were Boston Co., Roll & Ross Asset Management, RCM Capital Management and Dimensional Fund Advisors.

Dropped were Brinson Partners, Batterymarch, TSA Capital, Lazard Freres and Atalanta/Sosnoff.

Hawaii taps managers

The $4 billion Hawaii Employees' Retirement System hired three fixed-income managers for about $100 million each in a switch to core and active duration management from defensive.

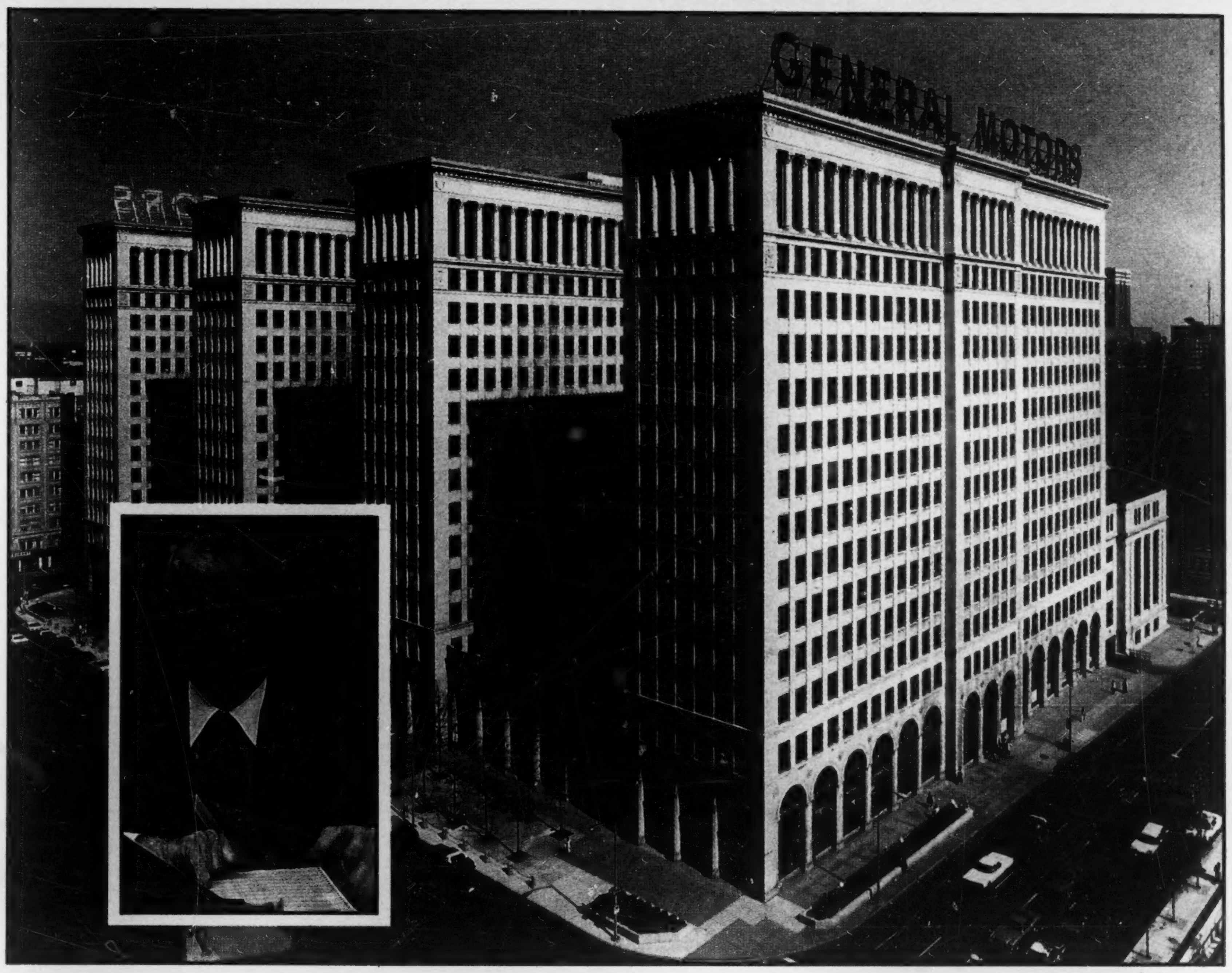
Hired were Lowe, Brockenbrough, Tierney & Tattersall, Brinson Partners and Bradford & Marzec Inc. Originally, the fund also selected Standish, Ayer & Wood, but could not reach agreement on fees.

Two fixed-income managers, including Lehman Ark, were terminated.

NYC business loans eyed

The $6 billion New York City Police Department fund will purchase $50 million in

See **At Deadline** *on page 84*



GM management, led by Roger Smith, inset, is reviewing the restructuring proposed by employees.

GM restructuring pushed

Employee-shareholder group offers novel 10-point plan

By Marcia Parker

DETROIT — A group of General Motors Corp. employee-shareholders is seeking the support of management, institutional investors and other workers for an innovative restructuring plan that includes a $1 billion leveraged ESOP to revitalize the nation's troubled top automaker.

The 10-point stock value enhancement proposal might be adopted by the company or could be unveiled in the form of a shareholder resolution at the 1990 annual meeting in Detroit May 25.

GM engineer George Lyon, a leader of the group that devised the plan, said the proposal was discussed with top GM officials last week. "They've looked at it and they are favorable about it," Mr. Lyon said following the meeting. "It is still subject to a lot of further discussion. If they adopt it, we wouldn't need to put it into the proxy."

It is highly unusual for a group of employees to propose a restructuring plan — especially without the help of legions of investment bankers — take the plan directly to management and consider using the proxy as a means to achieve it.

Obviously proud of GM, Mr. Lyon has worked there for 35 years; his father is a 42-year GM veteran. He was reluctant to discuss the negotiations while management is considering the plan. He stressed the restructuring plan "is not aimed at overturning management . . . It does restructure the company over the long term. It addresses the concerns of institutional shareholders . . . It will go a long way toward

See **General Motors** *on page 83*

Campeau action may hurt malls

By Terry Williams

Regional malls, which have been providing institutional investors with the highest returns in real estate, could drop in value as a result of the Jan. 15 bankruptcy filing by Allied Stores Corp. and Federated Department Stores Inc.

"There is not one doubt in my mind that the transaction price of regional malls — especially ones with these stores — will be lower today than three months ago," said Ronald A. Karp, president of a Summit, N.J., consulting firm that bears his name.

"It would be crazy to say that this would not be bad for property owners," Mr. Karp said.

"There is no more stability in the retail business," said Paul Saint-Pierre, president of Pension Realty Advisors, a real estate consulting firm in San Francisco.

Pension funds and other institutional investors own the majority of the nation's regional malls.

Mr. Saint-Pierre believes the investment decision-making process will change as a result of the bankruptcy filing by Toronto-based Campeau Corp.'s U.S. units.

"The investment decision will revolve around management's strategic plans to deal with a failed anchor," he said. "Can they bring another anchor in" in the event of a failure?

Many consultants and real estate managers said there may be adverse short-term effects because some vendors may refuse to ship merchandise, or if customers perceive that the Campeau stores

See **Campeau** *on page 83*

Markets fuel 18% asset gain

By Curtis Vosti

Fed by strong market returns, the assets of the 1,000 largest employee benefit plans surged 18.2% in the year ended Sept. 30, to $1.875 trillion from $1.586 trillion a year earlier.

The growth was a dramatic change from the stagnant 0.5% increase for the previous year, and occurred even though defined benefit plans paid out more in benefits than they received in contributions from sponsors.

Still, the growth narrowly trailed that which would have been achieved if the funds had garnered market returns in each of the asset categories in which they are invested. On that basis, *Pensions & Investments* estimates, the assets would have grown to $1.885 trillion, an increase of 18.9% from 1988.

The survey results reflect a maturing of the pension industry, according to consultants, as a more-educated plan sponsor community is reducing risks and increasing returns by investing internationally, and lowering costs through the use of in-house indexed funds.

This bodes well for the future of the pension industry at a time when its continuing strength is becoming crucial: 1988 was the first year pension benefit payments significantly exceeded Social Security payments.

"The future pool of retirees will rely more on pension payments than current retirees," said Joseph Piacentini, research analyst for the Employee Benefit Research Institute, Washington.

Defined benefit assets account for 81.4% of the pension assets of the Top 200 plans, according to the survey. Fueled mostly by market returns, defined benefit assets among the Top 200 plans grew 19.7%, to $1.164 trillion, and assets in defined contribution plans — including profit sharing plans and 401(k)s — grew 15.5%, to $265.3 billion.

Profit-sharing plans showed the largest percentage growth — 22.9% — among the 200 largest employee benefit funds, climbing to $14.5 billion, while 401(k)/thrift plans grew 5.3%, to $85.2 billion.

In aggregate, large funds grew faster than smaller ones in *P&I's* Top 1,000. While the 25, 50, 100 and 200 largest all registered gains of more than 19%, the bottom 800 grew 14.8% during the year, to $440.21 billion.

The 11th annual *P&I* survey of the Top 1,000 pension funds was compiled over a three-month period, through mailed questionnaires and follow-up telephone

See **Top 200** *on page 81*

Contributions lag benefit payments

By Fred Williams

Benefits paid by defined benefit plans in the largest 200 employee benefit funds and reported to *Pensions & Investments* in 1989 exceeded new contributions by more than $10 billion, largely because of corporations slashing or totally eliminating their contributions.

Most credit stellar investment returns for allowing many plans to cut back contributions during the 1980s. Indeed, 30 corporate funds reported making no contribution in *P&I's* 1989 data, compared with six in the 1988 data.

Benefit payments were about one-third greater than contributions: Total benefits paid by defined benefit plans in the Top 200 were $41.14 billion, while contributions to the plans totaled $30.72 billion.

The trend toward benefit payments outpacing contributions accelerated in the 1989 data, but began a year earlier, when benefit payments were $42 billion and contributions, $39.2 billion.

Among the 63 corporate funds giving data for both years, contributions reported to *P&I* in 1989 totaled $6 billion, vs. $9 billion reported in 1988. Benefit payments remained steady at $13 billion.

Contributions to the 52 public funds that provided data for both years dropped slightly, to $19.1 billion in 1989 from $19.3 billion in 1988. Benefit payments, however, rose slightly more, to $22.2 billion from $21.6 billion.

Data from Greenwich Associates Inc., Greenwich, Conn., showed contributions to corporate funds climbed to $40.5 billion in 1989, from $35 billion in 1986, but were expected to drop to $38.7 billion in 1989. Benefit payments made by corporate funds fell to $42.5 billion in 1988 from $48.6 billion in 1986, but were expected to climb to $46.8 billion in 1989.

The Greenwich data showed public fund contributions grew to $47.4 billion in 1988 from $30 billion in 1986; and were expected to be $42 billion in 1989. Benefits paid by public funds increased by a smaller amount, to $31.2 billion in 1988 from $27.7 billion in 1986, and were expected to be $34.2 billion in 1989.

Investment returns and changing tax laws are the main reasons sponsors cut their contributions. According to the Employee Benefit Research Institute, Washington, defined benefit plans returned a compound annual 19.2% for the five years ended Sept. 30.

"The strong capital markets over the last five or 10 years — which have provided a basically solid return well in excess of (pension funds') actuarial needs — have been a primary factor," said Philip J. Schneider, who works in Chicago as head of asset services for The Wyatt Co. Pension executives "have been able to build up a surplus and reduce tax-deductible contributions to their funds."

Jerry Facciani, president of Facciani & Co., Cleveland, cited the Omnibus Budget Reconciliation Act: "OBRA of 1987 clamped down on employer contributions to plans based on how well funded they are. If they are well funded, and many if not most plans are, the act generally precludes them from making contributions" that are tax deductible, he said.

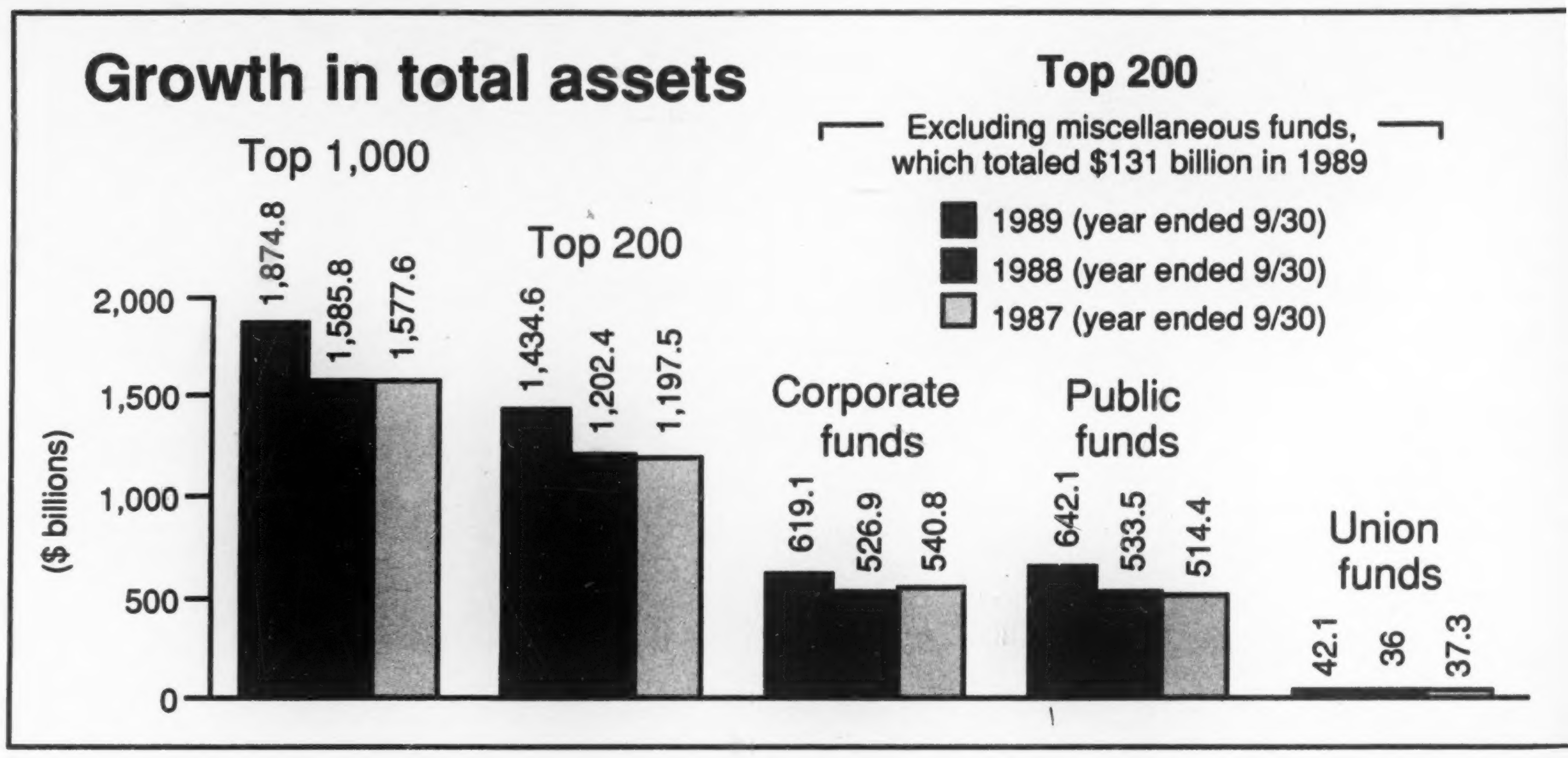
As for increasing benefit payments, Mr. Schneider said, they likely are a byproduct of "the whole business of an aging population and cost cutting by corporate America through early retirement programs."

"The only thing that could significantly alter (the growing gap between contributions and benefit payments) is an extended market downtrend, a significant market erosion that would require them to make contributions again."

Robert Ryan, an actuary with TPF&C in Dallas, said the differential between contributions and benefit payments "can't go on forever. You can't continue to take the money out and not put any back in."

John Byrd, investment management analyst with Rauscher Pierce Refsnes Inc., Dallas, said capital markets will not feel any effect from the slowdown in contributions. "It appears on the surface to be a net loss, but I don't think it is. It is a negative cash flow, which has nothing to do with the corpus or the body of pension assets. Investment gains have increased most pension funds significantly. So as far as the capital markets go, cash flow is not as important as the overall gains in financial assets over these past few years.

" . . . If the markets turn sour, then it could become an issue. But it would have to be a heck of a market drop for this to become an issue," Mr. Byrd said. ■


Growth in total assets

Indexed assets rebound

Public funds, internal management make difference

By Terry Williams

Indexing among defined benefit plans in *Pensions & Investments*' Top 200 employee benefit funds reversed its slide during the year ended Sept. 30, thanks to a significant gain in the use of equity and fixed-income indexing by public pension funds that largely manage the indexed assets internally.

After falling 7.66% on a market-adjusted basis for the year ended Sept. 30, 1988, defined benefit indexed equity assets increased about 2.25% on a market-adjusted basis in the year ended Sept. 30, 1989, according to *P&I* data. Indexed equity assets held by defined benefit funds in the Top 200 grew to $155.222 billion from $114.311 billion the year before. (The Standard & Poor's 500 Stock Index rose 32.8% during the year ended Sept. 30, and fell 12.39% during the previous 12-month period).

Defined benefit indexed fixed-income assets, meanwhile, climbed 21.9% on a market-adjusted basis to $55.412 billion as of Sept. 30 from $40.837 billion a year earlier. Indexed bond assets had fallen about 20% on a market-adjusted basis during the year ended Sept. 30, 1988. (The Shearson Lehman Hutton Government/Corporate Bond Index returned 11.3% for the year ended Sept. 30, and 12.8% for the year ended Sept. 30, 1988.)

Defined benefit equity index money managed internally increased 26.2% on a market-adjusted basis to $69.231 billion as of Sept. 30, from $41.3 billion a year earlier. Defined benefit bond index money managed in-house increased 540% to $16.405 billion as of Sept. 30, from $2.303 billion a year earlier.

Public funds in the Top 200 accounted for all of the growth in indexed assets managed internally. One — the $54 billion California Public Employees' Retirement System — was responsible for about one-third of the increase in internally managed equity indexed assets and more than one-fifth of the rise in stock indexing overall.

The California fund's indexed equity assets rose 216.4% to $13 billion as of Sept. 30, from $4.109 billion the previous year. The retirement system is working toward a goal of indexing about 85%, or $17 billion, of its $20 billion domestic stock portfolio.

Overall, indexed equity assets held by public funds grew a market-adjusted 8.8%, growing to $100.7 billion as of Sept. 30 from $69.7 billion a year earlier. Bond indexing among public funds increased by a market-adjusted 49.6% to $43.3 billion as of Sept. 30 from $26 billion a year earlier.

On a market-adjusted basis, both corporate and union funds decreased the amount of indexed stocks and bonds.

Pension executives clearly are getting more sophisticated in their use of indexing.

What began as a way to reduce fees for active investment management by many money managers who couldn't outperform the market has matured into a strategy used to move in and out of asset classes quickly and easily, as well as a vehicle in which to park excess cash.

Nestor Santiago, pension plan administrator with the World Bank, Washington, said he views indexing as a tactical allocation device.

"It's a quick way to get in and out of a particular asset class," Mr. Santiago said.

If General Electric Co. wants to reduce its pension fund's equity exposure, the change would be accomplished through index funds, as was done in 1988, explained Arthur Bahr, president of equity investments for GE in Stamford, Conn.

"We use it for asset allocation," Mr. Bahr said.

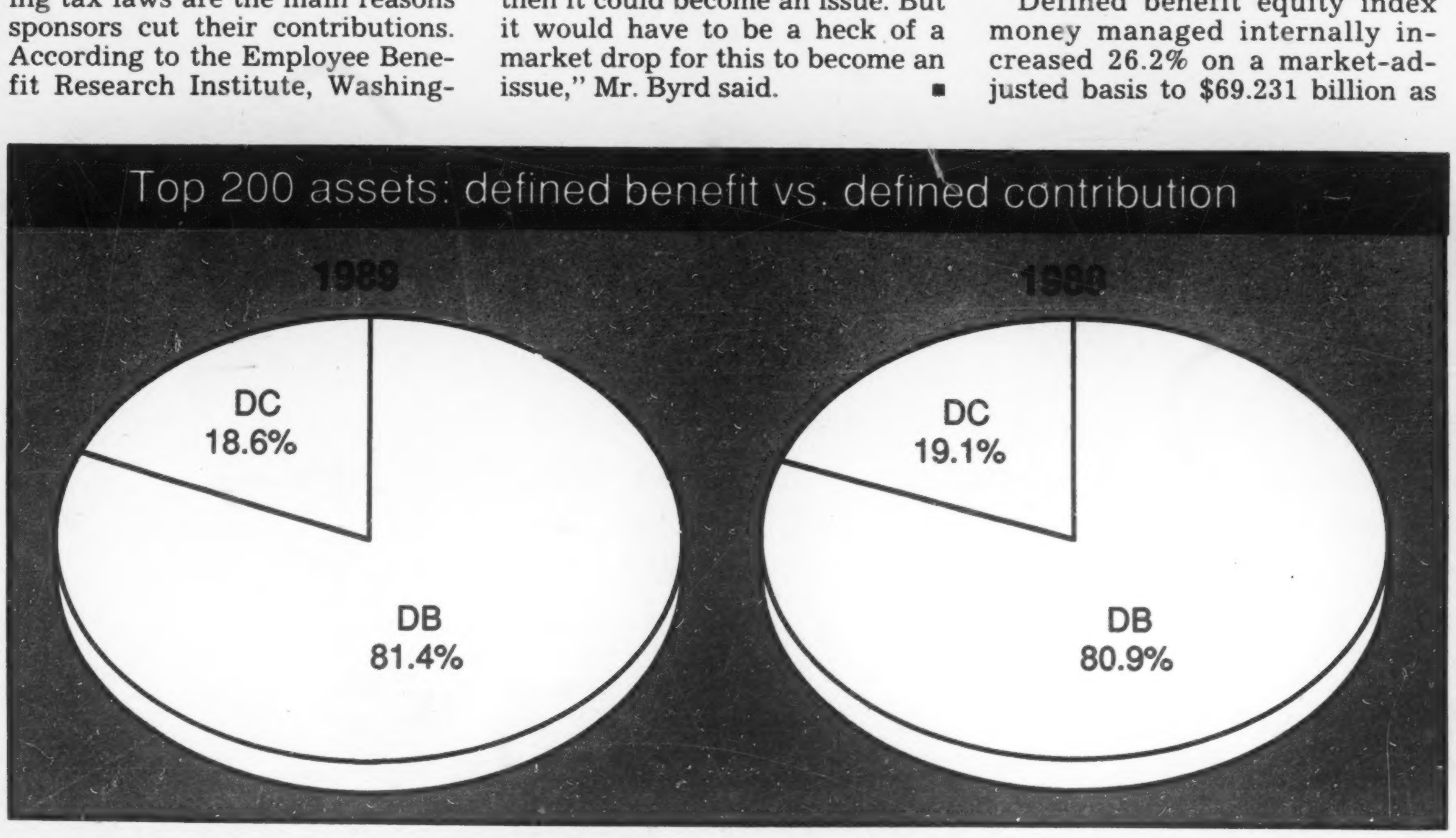
The pension fund of Amoco Corp., Chicago, uses equity indexing instead of holding onto cash, said Marvin Damsma, director-pension administration.

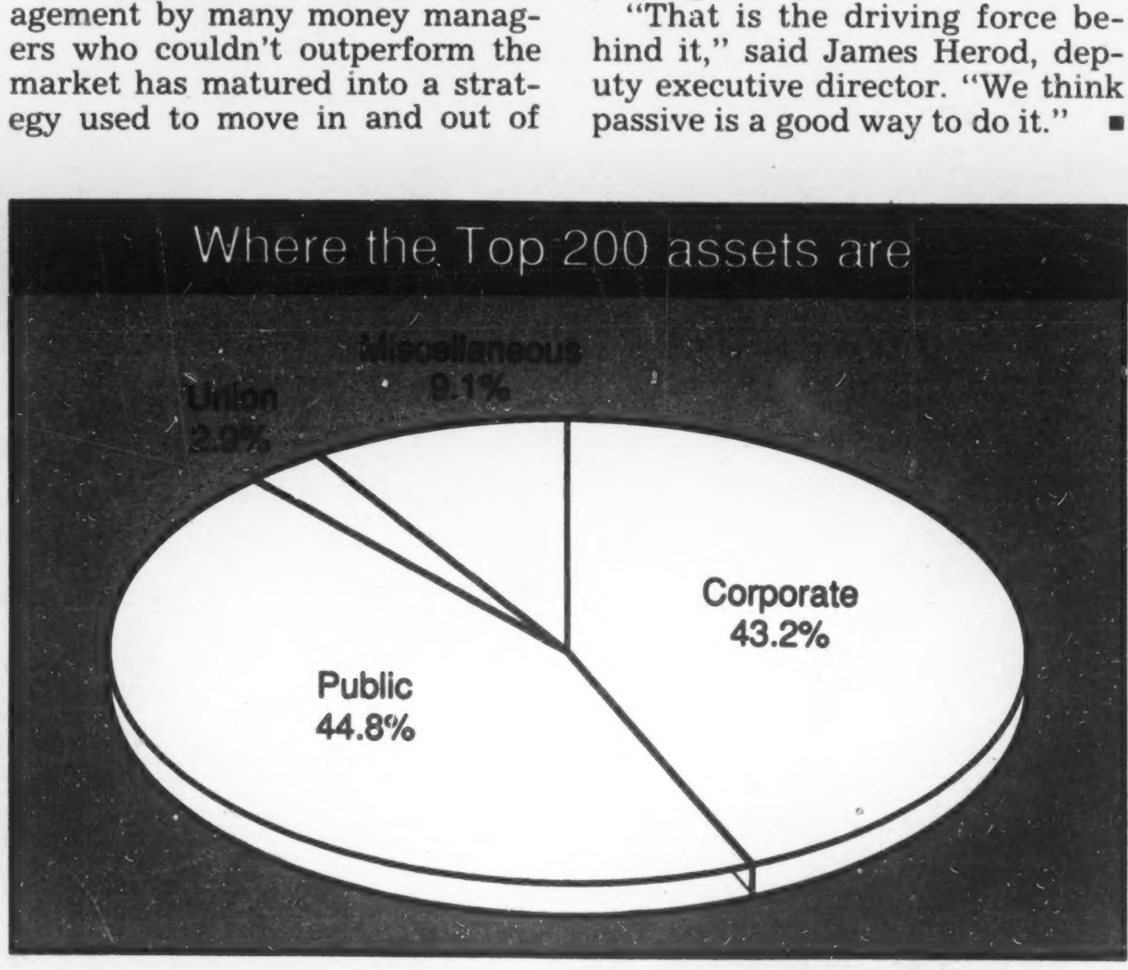
"We just use it as a daily liquidity fund," Mr. Damsma said. "It says nothing about our interest in indexing."

The Employees Retirement System of Texas, Austin, is using equity indexing — along with active management — to increase its equity exposure to 30%; the fund had 27% in equities as of Sept. 30, up from 21.9% a year earlier.

The Texas Employees fund's amount in equity index funds increased almost 87% on a market-adjusted basis to $499 million as of Sept. 30 from $201 million a year ago.

"That is the driving force behind it," said James Herod, deputy executive director. "We think passive is a good way to do it." ■


Top 200 assets: defined benefit vs. defined contribution


Where the Top 200 assets are

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Funds play manager field

J.P. Morgan remains most used adviser in *P&I* Top 200

By Hillary Durgin

Investment managers are trading on a wide range of services to attract new business and maintain their stable of clients from among the Top 200 largest pension funds.

Diversification seemed to be in everyone's interest in 1989, and pension executives' appetites ran the gamut when it came to the managers and the strategies they used. For money managers, the name of the game in 1989 was the ability to offer multiple products under one roof, whether the firms were banks or insurance companies or the tactics were active or passive, domestic or international.

J.P. Morgan Investment Management Inc., New York, guarded its position as the manager most frequently used overall with 61 accounts mentioned. The firm, which is an active, value-added manager, also ranked prominently among other asset classes, including fixed income and international, as did Wells Fargo Investment Advisors, San Francisco, the largest index fund manager and a hairbreadth competitor with 60 mentions overall.

Prudential Asset Management Group, Newark, N.J., which has a stable of separate management units, ranked third with 51 mentions, and Equitable Capital Management Corp./Equitable Real Estate Investment Management Inc., New York, ranked fourth with 49 mentions.

Trust Co. of the West, Los Angeles, another firm that runs assets in several classes, and Mellon Bank, with its host of subsidiary management companies, shared fifth place with 47 mentions each.

Pensions & Investments asked the Top 200 funds to list the managers they use to handle their defined benefit assets. If sponsors used a manager for more than one asset class, each counted in the manager's overall total. Their

See **Managers** *on page 67*

Top managers overall

	Times mentioned
J.P. Morgan	61
Wells Fargo	60
Prudential	51
Equitable	49
TCW	47
Mellon*	47
Bankers Trust	41
Aetna	39
Alliance	38
Capital Guardian	38

Top equity managers

	Times mentioned
Wells Fargo	30
Alliance	25
Mellon*	23
Bankers Trust	20
Capital Guardian	16
Loomis, Sayles	16
Dimensional Fund	15
INVESCO	15
Lazard Freres	15
Barrow, Hanley	14
RCM Capital	14
Trinity	14

Top bond managers

PIMCO	27
J.P. Morgan	24
Loomis, Sayles	14
Criterion	13
Miller, Anderson	12
Wells Fargo	12
Fischer, Francis	10
Lincoln Capital	10
Mellon*	10
Putnam	10

Top int'l managers

State Street Bank	15
Capital Guardian	14
J.P. Morgan	12
Baring Int'l	11
Brinson Partners	10
Morgan Grenfell	10
Nomura	10
Schroder Int'l	10
Wells Fargo	10
Worldinvest	9

Top realty managers

RREEF	76
JMB	34
Equitable	33
Prudential	27
Aetna	24
TCW	23
LaSalle	20
AEW	18
Copley	16
Heitman	13

*Includes all mentioned subsidiaries of Mellon Bank

Corporate funds demote real estate

By Steve Hemmerick

Major corporate defined benefit plans have dropped their percentage allocation to equity real estate half a percentage point below the 5% minimum consultants claim is necessary for real estate to have any positive diversification effects on the plans.

For the same period — the year ended Sept. 30, 1989 — public funds increased their percentage allocation to real estate slightly to 3.8% of assets from 3.4%.

The allocation figures were gleaned from *Pensions & Investments*' survey of the largest 200 employee benefit funds.

Dollar allocations to real estate for defined benefit plans were $18.7 billion for corporate, $22.3 billion for public, $788 million for union and $1.87 billion for miscellaneous.

For the 12-month period, the largest funds did make an estimated $5.9 billion investment in net new dollars, minus normal appreciation, into real estate for a 15.9% increase in assets.

In raw numbers, unadjusted for normal appreciation, the largest funds had $8.3 billion more in real estate. But virtually all of the new dollar increase came from public funds and regional telephone company pension plans.

For large corporate defined benefit plans, the percentage drop in the allocation to real estate was 0.6 percentage points, to 4.5% of assets from 5.1%.

Some of the loss in allocation could be attributed to the performance of the stock and bond markets, which by outperforming real estate, made the stock and bond portfolios larger by comparison.

But a further examination of the data showed that large corporate plans, excluding the four regional telephone companies in the Top 200 that reported their real estate assets, invested only $105 million more in real estate when their investments were adjusted for the normal appreciation of real estate assets of 6.7%.

The pension funds of regional telephone companies, which became independent last decade, have been in a growth mode and are atypical of most major corporate plans.

The 6.7% return figure used to determine normal appreciation was the increase for real estate for the year ended Sept. 30 in the FRC Index for real estate. It is considered a conservative indicator because it doesn't include developmental or leveraged real estate.

Consultants have long contended that pension plans need at least 5% of their assets in real estate for its diversification effects to be felt, and many consultants recommend a 10% allocation to real estate.

But according to Paul Saint-Pierre, president of the real estate consulting firm Pension Realty Advisors, San Francisco, major corporate plans as a group have not been increasing their allocation to real estate because many are overfunded and aren't making employer contributions, which provide cash for new investment.

He also said corporate fund executives generally have shown an unwillingness to take money from their high-performing stock and bond portfolios to put into real estate to keep the same asset allocation level.

That reluctance stems partly from concerns about the real estate market, he said. In other cases, he said, some corporate plans are satisfied with their current real estate allocation.

There are exceptions. Sears, Roebuck & Co., Chicago, increased its allocation to real estate to $88 million from $40 million, which seems to be a significant increase.

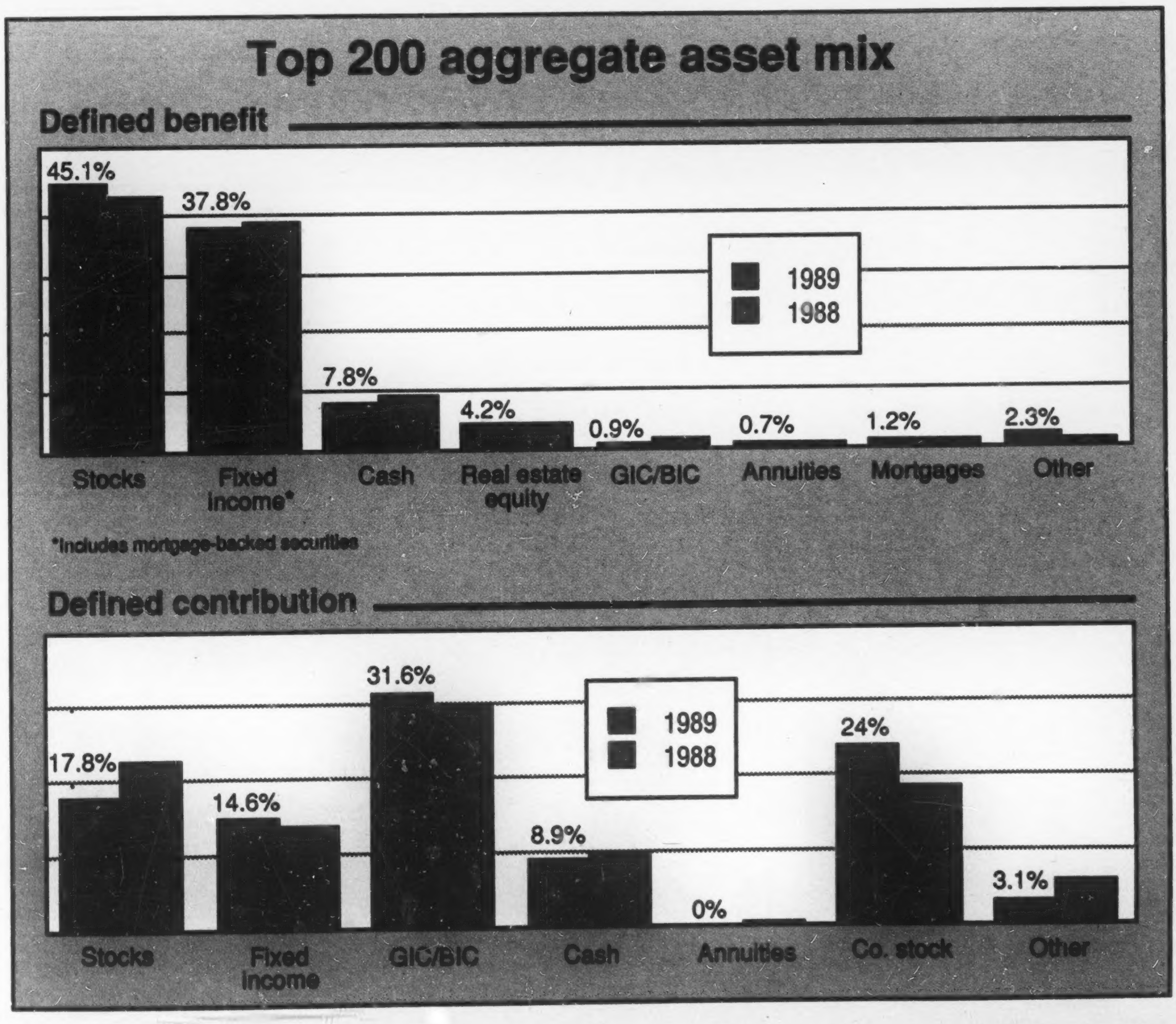
But David D. Dootson, president of Sears Investment Management, Chicago, said: "The (Sears defined benefit) plan is $3 billion so (on a relative basis) $40 million is almost irrelevant. You've got to put it in perspective. It didn't represent any significant shift; it just brought it up a little higher."

Even in the case one of the baby Bells — Southwestern Bell Corp. — sharp increases in real estate have ended.

Southwestern Bell's $7.166 billion defined benefit plan had an $89 million increase in equity real estate investments, to $749 million from $660 million.

But Mary Anne Devine, director of pension investments, said the plan has reached its targeted 10% allocation to real estate, and future increases will come from appreciation, not major flows of new

See **Real estate** *on page 68*


Top 200 aggregate asset mix

*Includes mortgage-backed securities

International investments skyrocket 43%

By Margaret Price

Assets invested overseas by defined benefit plans in *Pensions & Investments*' 200 largest employee benefit funds soared in the 12 months ended Sept. 30 amid a combination of new and increased outlays by funds and hefty market appreciation.

In all, funds' foreign holdings surged almost 43% to $39.359 billion. Of this figure, the $32.738 billion in equities represented a whopping 56% rise from 1988's level, while foreign bond holdings only increased 4.5%.

In foreign equities, market appreciation significantly benefited funds. The Morgan Stanley Capital International Europe Australia Far East Index climbed 22.6% during the 12-month period. Adjusted for that boon, the Top 200 foreign equities total rose 27.2%.

Overseas bond holdings dropped a hair when adjusted for the Salomon Brothers World Government Bond Index's 6.5% rise in dollar terms during the period.

In addition, many of the largest funds increased their international allocation, in some cases to meet targets or expand their investing horizons beyond traditional styles and/or markets.

Many — but not all — first-time foreign investors were public funds, such as the behemoth California Public Employees' Retirement System. Plunging into overseas investing during 1989, that $54 billion fund by Sept. 30 catapulted to become the second largest foreign investor among U.S. funds, with a $2.7 billion overseas allocation. By mid-December that total had climbed to slightly more than $3 billion.

During the 12 months ended Sept. 30, at least six of the Top 200 pension funds made initial foreign investments, including Wisconsin State Board, with its $705 million commitment; Los Angeles Fire & Police Pension System fund, $155 million; Maine State Retirement System, $85 million; New York State & Local Retirement Systems, $83 million; and the Annuity Board of the Southern Baptist Convention, $38 million.

"International has become the most frequently appointed asset class by U.S. pension funds," noted Christopher A. Nowakowski, president of InterSec Research Corp., Stamford, Conn. Their "higher comfort level with international investing, combined with the introduction of new and intriguing products, means they're not (still) clawing money back," he said. In 1989, "for the first time in three or four years the amount that pension funds" reclaimed "was well below the historic trend."

In 1989, pension funds found a variety of attractions overseas — from major markets to emerging ones, and even to foreign real estate, venture capital and leveraged buy-out opportunities. Pension funds that invested in the MMG Patricof European Buy-In Fund included the Massachusetts Pension Reserves Investment Management Board, Union Carbide Corp., Textron Inc., Eastman Kodak Co., IBM Corp., General Motors Corp. and American Telephone & Telegraph Co.

The $1.194 billion defined benefit fund of CIGNA Corp., Hartford, Conn., was among the funds that lifted its foreign equities allocation. While CIGNA's overseas equity holdings rose about $34 million in the 12 months, some $25 million of that represented new allocations while the remainder came from market appreciation. George Trumbull, CIGNA's executive vice president and chief investment officer, said the company had been bullish on both the U.S. and European stock markets, a sentiment that prompted the fund to raise its allocations to some European markets as well as the U.S. market.

Given its concern about valuations in the Japanese stock market, the $566 million defined benefit pension fund of Motorola Inc., Schaumburg, Ill., is holding to its 5% international exposure, which is down from 10% in 1985 and 1986, noted Garth Milne, vice president and treasurer. "We pulled a lot of money out of stock markets worldwide in 1987 before the markets crashed," he said. The fund since has increased its allocations to the U.S. market,

See **Foreign** *on page 66*

Profile statistics at a glance

($ billions)

	1989	1988
Top 1,000 assets	1,874.8	1,585.8
Top 200 assets	1,434.6	1,202.4
Top 100 assets	1,202.3	1,004.1
Top 50 assets	943.9	791.8
Top 25 assets	694.1	581.9
Top 200 defined benefit	1,164.0	972.8
Top 200 defined contribution	265.3	229.6
Top 200 profit sharing	14.5	11.8
Top 200 401(k)/thrift	85.2	80.9
Top 200 defined benefit		
Internal management*	490.8	426.7
Internally managed equities	173.5	139.6
Internally managed fixed income	224.4	198.8
Internally managed short-term	39.6	37.7
Internally managed real estate equity	17.1	na**
Internally managed other	22.9	31.9
Equity index funds	155.2	114.3
Internally managed indexed equities	69.2	41.3
Bond index funds	55.4	40.8
Internally managed indexed bonds	16.4	2.3
Real estate equity	43.7	35.3
Mortgages	16.7	18.8
Mortgage-backed securities	60.7	50.0
GICs/BICs	3.9	8.0
Overseas	39.4	27.6
Overseas equity	32.7	21.0
Overseas fixed income	6.1	5.8
Overseas other	0.6	0.8
Venture capital	4.4	3.9
Dedicated/immunized bonds	34.1	26.4
Oil & gas	0.8	0.7
LBOs	4.5	3.5
Private placements	10.5	11.3
Contributions paid	30.7	39.2
Benefits paid	41.1	42.0
Top 200 defined contribution		
Internal management*	119.5	
Internally managed equities	43.6	
Internally managed fixed income	51.1	
Internally managed short-term	13.6	
Internally managed real estate equity	3.1	
Internally managed other	7.4	
Equity index funds	32.5	
Internally managed indexed equities	27.0	
Bond index funds	0.3	
Internally managed indexed bonds	0.0	
Real estate equity	3.7	
Mortgages	18.1	
Mortgage-backed securities	2.4	
GICs/BICs	36.0	
Overseas	5.3	
Overseas equity	5.1	
Overseas fixed income	0.2	
Overseas other	0.0	
Venture capital	0.3	
Dedicated/immunized bonds	0.3	
Oil & gas	0.2	
LBOs	0.7	
Private placements	10.0	
Contributions paid	9.2	

*Total is greater because some funds did not provide a break-out.

**Internally managed real estate equity figure was included in "other" in 1988.

How information was gathered

The information on employee benefit funds contained in this special report was compiled in several steps.

Questionnaires were sent to more than 1,400 funds in *Pensions & Investments*' data base. The largest 200 and largest 1,000 were identified from the completed questionnaires, follow-up telephone calls and a cross-check with information supplied by Money Market Directories Inc., Charlottesville, Va., publisher of the 1990 Money Market Directory of Pension Funds and Their Investment Managers.

The more detailed information contained in the profiles of the Top 200 employee benefit funds was obtained from the completed questionnaires and from interviews with fund officials by the editorial staff of *P&I*.

Where no information was available from the fund, asset figures were taken from the 1990 Money Market Directory.

Unless otherwise noted, the data reflect fund operations as of Sept. 30, 1989.

In cases where the fund supplied data considered too old, *P&I* estimated the asset growth based on one of the following methods: the most recent asset mix supplied by the fund; the asset mix reported in the 1990 Money Market Directory; or *P&I's* reported average asset mix for that particular type of fund, i.e. union, corporate or public. In some cases, the estimates were based on asset totals reported in the sponsor's most recent annual report.

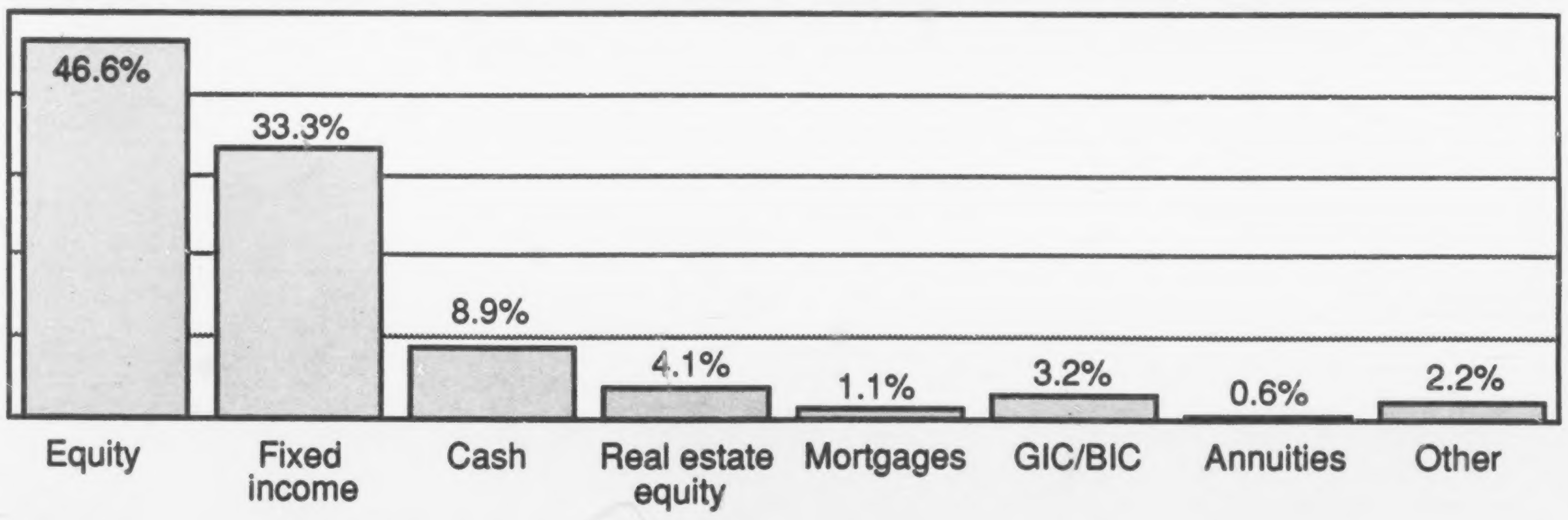
In the tables accompanying the profiles, all dollar amounts are rounded to the nearest million.

The asset mixes for the Top 200 and Bottom 800 funds represent the average of all reported allocations for the respective funds. The separate asset mixes for the components of the Top 200 and Bottom 800 universes — corporate, public and union funds — were compiled in the same manner.

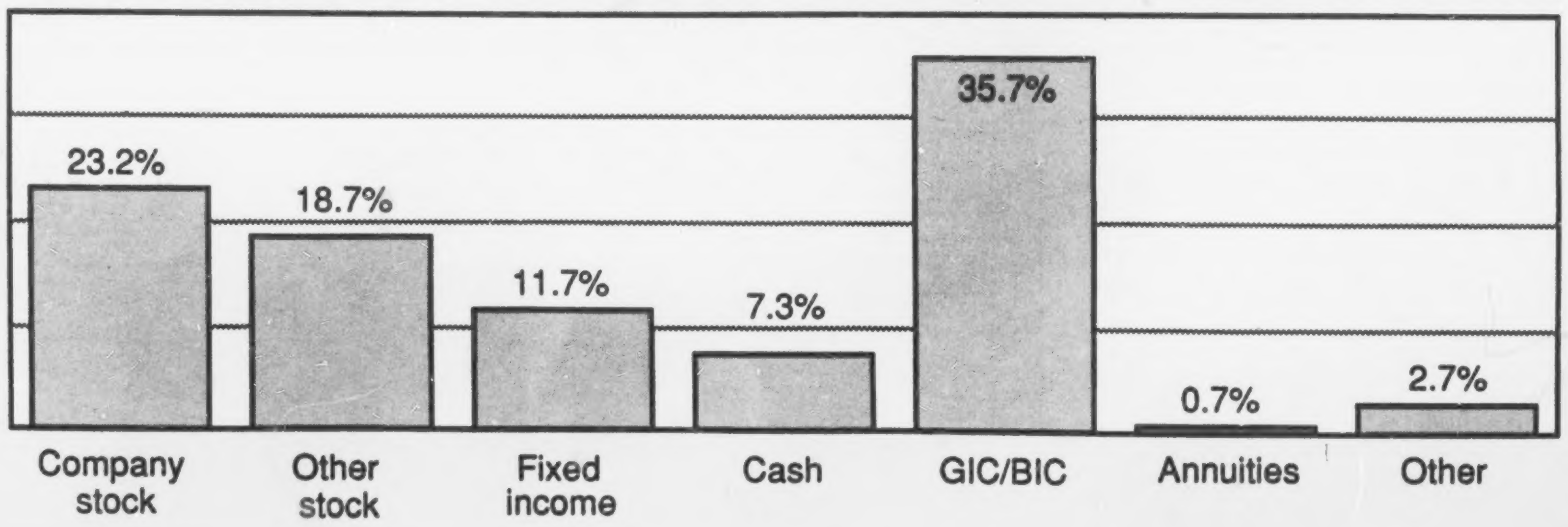
This is the 11th consecutive year *P&I* has ranked the nation's 1,000 largest employee benefit funds and the ninth year separate listings have appeared for the Top 200. ■

Top 1,000 aggregate asset mix

Defined benefit



Defined contribution



Top 200 pension funds/sponsors

Assets in $ millions

1.	TIAA-CREF	81,000
2.	California Public Employees	54,000
3.	New York City	45,422
4.	New York State & Local	44,238
5.	AT&T	42,700
6.	General Motors	40,900
7.	California State Teachers	30,335
8.	General Electric	28,912
9.	New York State Teachers	28,130
10.	IBM	25,775
11.	N.J. Division of Investment	24,526
12.	Texas Teachers	23,500
13.	Ford Motor	22,800
14.	Wisconsin State Board	20,033
15.	Ohio Public Employees	19,305
16.	Florida State Board	18,700
17.	E.I. du Pont de Nemours	18,681
18.	Ohio State Teachers	18,059
19.	Michigan Retirement Systems	17,948
20.	North Carolina	16,791
21.	NYNEX	16,062
22.	Pennsylvania Public Schools	15,430
23.	Ameritech	14,300
24.	Bell Atlantic	13,635
25.	University of California	12,900
26.	BellSouth	12,843
27.	Washington State Board	12,660
28.	GTE	12,423
29.	Minnesota State Board	12,343
30.	Pacific Telesis	11,443
31.	Oregon Public Employes	11,178
32.	Maryland State Retirement	11,065
33.	Boeing	11,001
34.	Virginia Supplemental	10,244
35.	Teamsters, Central States	9,849
36.	USX	9,825
37.	U S WEST	9,800
38.	Pennsylvania State Employes	9,504
39.	Eastman Kodak	9,500
40.	Los Angeles County	9,359
41.	Colorado Public Employees	9,227
42.	Rockwell International	9,124
43.	Teamsters, Western Conference	9,084
44.	Lockheed	8,926
45.	Georgia Teachers	8,908
46.	Illinois Teachers	8,475
47.	United Nations Joint Staff	8,414
48.	Southwestern Bell	8,334
49.	United Technologies	8,261
50.	Sears, Roebuck	8,101
51.	Tennessee Consolidated	8,075
52.	Exxon	8,066
53.	Connecticut Trust Funds	7,996
54.	Alabama Retirement Systems	7,884
55.	Shell Oil	7,840
56.	Arizona State Retirement	7,612
57.	McDonnell Douglas	7,589
58.	Philip Morris	7,470
59.	South Carolina Retirement	7,072
60.	Chevron	7,069
61.	Allied-Signal	7,000
62.	Massachusetts Teachers/Employees	6,650
63.	Hughes Aircraft	6,572
64.	Prudential Insurance	6,042
65.	General Dynamics	6,000
66.	Texas Employees	5,969
67.	Westinghouse Electric	5,828
68.	Chrysler	5,467
69.	Missouri Public Schools	5,328
70.	UMWA	5,300
71.	Unisys	5,022
72.	Procter & Gamble	4,970
73.	Iowa Public Employees	4,900
74.	Caterpillar	4,779
75.	Amoco	4,581
76.	Mobil Oil	4,560
77.	Illinois Municipal	4,326
78.	Federal Retirement Thrift	4,319
79.	Monsanto	4,300
80.	Pacific Gas & Electric	4,259
81.	Mississippi Public Employees	4,129
82.	Alaska Retirement Systems	4,124
83.	RJR Nabisco	4,100
84.	Hawaii State Employees	4,051
85.	Delta Air Lines	4,050
86.	American Airlines	4,000
87.	San Francisco City/County	3,916
88.	Utah State Retirement	3,908
89.	Illinois State Universities	3,845
90.	United Airlines	3,700
91.	Kansas Public Employees	3,692
92.	National Electrical Contractors	3,675
93.	Northrop	3,623
94.	Detroit Systems	3,587
95.	United Methodist Church	3,566
96.	Atlantic Richfield	3,541
97.	Chicago Teachers	3,502
98.	Minnesota Mining & Mfg.	3,490
99.	Los Angeles Fire & Police	3,477
100.	Kentucky Teachers	3,461
101.	Georgia Employees	3,458
102.	Xerox	3,405
103.	Metropolitan Life	3,393
104.	J.C. Penney	3,308
105.	World Bank	3,292
106.	Louisiana Teachers	3,265
107.	Nevada Public Employees	3,236
108.	Martin Marietta	3,201
109.	Aluminum Co. of America	3,200
110.	Kentucky Retirement System	3,200
111.	Texaco	3,200
112.	Illinois State Board	3,173
113.	Grumman	3,170
114.	Bethlehem Steel	3,155
115.	Textron	3,121
116.	Southern	3,100
117.	TRW	3,096
118.	Tennessee Valley Authority	3,090
119.	State Farm Insurance	3,083
120.	Ohio Police & Firemen	3,070
121.	Raytheon	3,050
122.	Consolidated Edison	2,962
123.	Honeywell	2,909
124.	Tenneco	2,877
125.	Indiana Public Employees	2,817
126.	Ohio School Employees	2,817
127.	Massachusetts PRIM	2,791
128.	Deere	2,720
129.	International Paper	2,709
130.	Aetna	2,703
131.	Dow Chemical	2,700
132.	Union Carbide	2,693
133.	Owens-Illinois	2,644
134.	Southern Baptist Convention	2,559
135.	ITT	2,497
136.	Los Angeles City	2,497
137.	Trans World Airlines	2,470
138.	Eli Lilly	2,432
139.	Eastern Airlines	2,410
140.	Presbyterian Church (U.S.A.)	2,400
141.	Southern California Edison	2,380
142.	National Rural Electric Co-op	2,304
143.	Rhode Island Retirement	2,300
144.	Halliburton	2,270
145.	Louisiana State Employees	2,250
146.	Phillips Petroleum	2,250
147.	Hospital/Healthcare Employees	2,241
148.	BP America	2,218
149.	Texas Municipal	2,200
150.	Bakery & Confectionery Union	2,175
151.	Arkansas Teachers	2,166
152.	Commonwealth Edison	2,161
153.	Operating Engineers, Central Fund	2,159
154.	Armco	2,156
155.	Southern California UFCW	2,133
156.	Boilermaker/Blacksmith	2,132
157.	Travelers	2,075
158.	Navistar	2,058
159.	Citicorp	2,056
160.	Inland Steel	2,041
161.	Motorola	2,017
162.	Texas County & District	2,000
163.	Oklahoma Teachers	1,968
164.	FPL Group	1,963
165.	Abbott Laboratories	1,923
166.	Southern New England Telephone	1,912
167.	New Mexico Educational	1,890
168.	American Stores	1,882
169.	PPG Industries	1,880
170.	Chicago Municipal	1,845
171.	Episcopal Church	1,837
172.	United Parcel Service	1,802
173.	Los Angeles Water & Power	1,800
174.	Maine State Retirement	1,800
175.	New Mexico Public Employees	1,800
176.	American Electric Power	1,789
177.	Evangelical Lutheran Church	1,782
178.	CIGNA	1,775
179.	K mart	1,775
180.	Philadelphia City	1,754
181.	Hercules	1,752
182.	New York Life	1,749
183.	Digital Equipment	1,742
184.	GenCorp	1,719
185.	Cooper Industries	1,700
186.	Indiana State Teachers	1,700
187.	Hewlett-Packard	1,699
188.	I.A.M. National Pension	1,695
189.	American Brands	1,684
190.	Chase Manhattan	1,684
191.	Anheuser-Busch	1,670
192.	Teledyne	1,668
193.	Bechtel Power	1,655
194.	Consolidated Natural Gas	1,648
195.	Idaho Public Employees	1,643
196.	Milwaukee City	1,641
197.	Equitable Life	1,639
198.	Bank of America	1,633
199.	Pan Am World Airways	1,621
200.	Plumbers National Headquarters	1,615
	Total	**$1,434,604**

Ranking of funds/sponsors 201-1,000

Assets in $ millions

Rank	Fund/sponsor	Location	Assets
201.	NCR	Dayton, Ohio	1,602
202.	Baltimore Employees	Baltimore	1,600
203.	Chicago Police	Chicago	1,595
204.	Nat'l Sheet Metal Wkrs.	Alexandria, Va.	1,576
205.	Mo. State Employees	Jefferson City	1,574
206.	Delaware State	Dover	1,572
207.	Ralston Purina	St. Louis	1,570
208.	Okla. Public Employees	Oklahoma City	1,552
209.	North American Philips	New York	1,535
210.	Sun	Radnor, Pa.	1,523
211.	Army & Air Force	Dallas	1,516
212.	Arizona Public Safety	Phoenix	1,513
213.	Johnson & Johnson	N. Brunswck, N.J.	1,500
214.	Philadelphia Electric	Philadelphia	1,500
215.	United Telecom.	Kansas City, Mo.	1,497
216.	Texas Instruments	Dallas	1,469
217.	Northwest Airlines	St. Paul, Minn.	1,462
218.	John Hancock	Boston	1,459
219.	Unocal	Los Angeles	1,444
220.	Kaiser Permanente	Oakland, Cal.	1,433
221.	ICMA Retirement	Washington	1,425
222.	Wyoming Retirement	Cheyenne	1,422
223.	American Cyanamid	Wayne, N.J.	1,414
224.	Michigan Municipal	Lansing	1,414
225.	BATUS	Louisville, Ky.	1,400
226.	District of Columbia	Washington	1,400
227.	James River	Richmond, Va.	1,400
228.	Nat'l Auto Dealers	McLean, Va.	1,400
229.	Cook County Empl.	Chicago	1,386
230.	Bristol-Myers	New York	1,382
231.	Federated Dept. Stores	Cincinnati	1,379
232.	Orange County Empl.	Santa Ana, Cal.	1,372
233.	Dun & Bradstreet	New York	1,371
234.	West Virginia State	Charleston	1,370
235.	Champion International	Stamford, Conn.	1,368
236.	Pacific Enterprises	Los Angeles	1,361
237.	Arkansas Employees	Little Rock	1,359
238.	Goodyear Tire & Rubber	Akron, Ohio	1,359
239.	S. Dakota Retirement	Pierre	1,358
240.	Colgate Palmolive	New York	1,354
241.	Litton Industries	Beverly Hills	1,351
242.	Eaton	Cleveland	1,349
243.	Financial Institutions	White Plains, N.J.	1,345
244.	Merck	Rahway, N.J.	1,342
245.	N. Calif. Retail Clerks	Walnut Creek	1,338
246.	Sandia National Labs	Albuquerque	1,338
247.	Public Service E&G	Newark, N.J.	1,326
248.	Armstrong World Ind.	Lancaster, Pa.	1,324
249.	McDermott	New Orleans	1,320
250.	Dominion Resources	Richmond, Va.	1,314
251.	Nebraska State	Lincoln	1,307
252.	LTV	Dallas	1,302
253.	Pfizer	New York	1,300
254.	Warner Lambert	Mor. Plains, N.J.	1,300
255.	SmithKline Beecham	Philadelphia	1,298
256.	Unilever USA	New York	1,285
257.	S. Calif. Op. Eng. #12	Pasadena, Cal.	1,278
258.	U.S. Air	Washington	1,276
259.	Quaker Oats	Chicago	1,273
260.	Texas Utilities	Dallas	1,260
261.	Int'l Monetary Fund	Washington	1,250
262.	Montana Board	Helena	1,250
263.	Upjohn	Kalamazoo, Mich.	1,250
264.	Hallmark Cards	Kansas City, Mo.	1,249
265.	Duke Power	Charlotte, N.C.	1,233
266.	Op. Eng. #3	San Francisco	1,223
267.	Graphic Arts Int'l	Washington	1,222
268.	Olin	Stamford, Conn.	1,222
269.	Rohm & Haas	Philadelphia	1,220
270.	GPU	Parsippany, N.J.	1,218
271.	Emerson Electric	St. Louis	1,200
272.	Teamsters, New Eng.	Boston	1,200
273.	May Dept. Stores	St. Louis	1,197
274.	Corning	Corning, N.Y.	1,194
275.	Mass. Institute of Tech.	Cambridge	1,191
276.	Occidental Petroleum	Los Angeles	1,182
277.	Union Pacific	Bethlehem, Pa.	1,180
278.	FMC	Chicago	1,170
279.	Scott Paper	Philadelphia	1,170
280.	Deseret Mutual	Salt Lake City	1,165
281.	PepsiCo	Purchase, N.Y.	1,153
282.	N. Calif. Carpenters	Oakland	1,152
283.	Times Mirror	New York	1,151
284.	CIBA-GEIGY	Ardsley, N.Y.	1,150
285.	Kimberly-Clark	Dallas	1,150
286.	Georgia-Pacific	Atlanta	1,147
287.	MEBA	Baltimore	1,135
288.	LGWU	New York	1,126
289.	Time Warner	New York	1,125
290.	Columbia Gas System	Wilmington, Del.	1,117
291.	Whirlpool	Benton Harbor	1,110
292.	Cummins Engine	Columbus, Ind.	1,108
293.	Kroger	Cincinnati	1,106
294.	Weyerhaeuser	Tacoma, Wash.	1,100
295.	BASF	Parsippany, N.J.	1,088
296.	San Diego County	San Diego	1,088
297.	Contel	Atlanta	1,086
298.	Boise Cascade	Boise, Idaho	1,076
299.	General Mills	Minneapolis	1,074
300.	Continental Can	Norwalk, Conn.	1,071
301.	Op. Eng. #302/612	Seattle	1,071
302.	Niagara Mohawk Power	Syracuse, N.Y.	1,070
303.	Reynolds Metal	Richmond, Va.	1,060
304.	W.R. Grace	New York	1,054
305.	Ashland Oil	Ashland, Ky.	1,053
306.	Bayer USA	Pittsburgh	1,050
307.	Detroit Edison	Detroit	1,049
308.	Northeast Utilities	Hartford, Conn.	1,038
309.	Elec. Ind. Joint Board	Flushing, N.Y.	1,029
310.	N.H. Retirement	Concord, N.H.	1,027
311.	Hoffman La Roche	Nutley, N.J.	1,020
312.	Montgomery Ward	Chicago	1,018
313.	Northern States Power	Minneapolis	1,002
314.	American Nat'l Can	Chicago	1,000
315.	ARAMCO Services	Houston	1,000
316.	CBS	New York	1,000
317.	Hoechst Celanese	Somerville, N.J.	1,000
318.	Liberty Mutual	Boston	1,000
319.	Dana	Toledo, Ohio	999
320.	Motion Picture Industry	Studio City, Cal.	994
321.	Schlumberger	New York	985
322.	Ingersoll-Rand	W'dcliff Lake,N.J.	980
323.	Combustion Engineering	Stamford, Conn.	975
324.	Kellogg	Battle Crk, Mich.	975
325.	CSX	Richmond, Va.	973
326.	Consumers Power	Jackson, Mich.	967
327.	Whitman	Chicago	966
328.	Westvaco	New York	953
329.	Norfolk Southern	Norfolk, Va.	951
330.	Conrail	Philadelphia	947
331.	N.Y. Dist. Carpenters	New York	945
332.	Chicago Transit Auth.	Chicago	945
333.	Cincinnati Bell	Cincinnati	941
334.	R.R. Donnelley	Chicago	940
335.	Polaroid	Cambridge,Mass.	940
336.	United Church of Christ	New York	936
337.	Baxter International	Deerfield, Ill.	934
338.	Farley Industries	Chicago	933
339.	Federal Express	Memphis, Tenn.	926
340.	San Jose City	San Jose, Cal.	920
341.	S. Calif. Carpenters	Los Angeles	918
342.	Cincinnati City	Cincinnati	918
343.	Control Data	Minneapolis	912
344.	Pillsbury	Minneapolis	911
345.	Bell Comm. Research	Livingston, N.J.	909
346.	Entergy	New Orleans	907
347.	Marsh & McLennan	Brooklyn, N.Y.	901
348.	Sacramento County	Sacramento, Cal.	901
349.	Greyhound Lines	Dallas	900
350.	Hanson Industries	Iselin, N.J.	900
351.	Manville	Denver	900
352.	Michigan Civil Service	Lansing	894
353.	Lutheran Church-Mo.	St. Louis	883
354.	Centerior Energy	Cleveland	881
355.	Fluor	Irvine, Cal.	881
356.	Alameda County	Oakland, Cal.	870
357.	Central & South West	Dallas	865
358.	San Bernardino County	S. Bernard., Cal.	861
359.	Squibb	Princeton, N.J.	854
360.	American Red Cross	Alexandria, Va.	852
361.	Jefferson-Smurfit	St. Louis	851
362.	Panhandle Eastern	Houston	850
363.	Capital Cities/ABC	New York	841
364.	Minneapolis Employees	Minneapolis	839
365.	Denver Public Schools	Denver	838
366.	Mead	Dayton, Ohio	836
367.	Safeway	Oakland, Cal.	830
368.	Greyhound Lines Amal.	Des Moines	827
369.	Blue Cross/Shield Nat'l	Chicago	825
370.	San Diego City	San Diego	825
371.	Black & Decker	Towson, Md.	821
372.	Owens-Corning	Toledo, Ohio	817
373.	Pennsylvania P&L	Allentown, Pa.	817
374.	Borden	Columbus, Ohio	815
375.	Central Pa. Teamsters	Reading, Pa.	815
376.	Mass. Bay Transit	Boston	814
377.	Colt Industries	New York	804
378.	Campbell Soup	Camden, N.J.	803
379.	Ethyl	Richmond, Va.	800
380.	Harris	Melbourne, Fla.	800
381.	National Steel	Pittsburgh	800
382.	N. Dakota State Board	Bismarck	800
383.	Arthur Andersen	Chicago	780
384.	Dallas City	Dallas	775
385.	YMCA	New York	775
386.	Milwaukee County	Milwaukee	770
387.	N.J. Hospital Assoc.	Princeton, N.J.	770
388.	Baltimore County	Towson, Md.	762
389.	Burlington Resources	Seattle	760
390.	Coca-Cola	Atlanta	751
391.	Santa Fe Pacific	Chicago	750
392.	Winn Dixie Stores	Jacksonville, Fla.	749
393.	Dayton Hudson	Minneapolis	748
394.	Boston City	Boston	747
395.	Enron	Houston	745
396.	Contra Costa County	Martinez, Cal.	741
397.	Paramount Comm.	New York	741
398.	Jacksonville City	Jacksonville, Fla.	736
399.	Steelcase	Gr. Rapids, Mich.	734
400.	Kaiser Alum./Chemical	Oakland, Cal.	731
401.	Maytag	Newton, Iowa	730
402.	DeLuxe	St. Paul, Minn.	725
403.	Memphis City	Memphis, Tenn.	725
404.	Baltimore G&E	Baltimore	723
405.	Johnson Controls	Milwaukee	720
406.	Farmland Industries	Kansas City, Mo.	713
407.	Navy Resale/Support	New York	712
408.	Sundstrand	Rockford, Ill.	711
409.	Op. Eng. Midwest	Countryside, Ill.	710
410.	Gillette	Boston	707
411.	Goldman, Sachs	New York	705
412.	Montgomery Co. Empl.	Rockville, Md.	702
413.	Masters, Mates & Pilots	Linth. Hgts., Md.	700
414.	Ohio Edison	Akron	693
415.	Peoples Energy	Chicago	692
416.	Union Camp	Wayne, N.J.	691
417.	E-Systems	Dallas	690
418.	General Signal	Stamford, Conn.	689
419.	Nat'l Automatic Sprinkler	Landover, Md.	688
420.	Brunswick	Skokie, Ill.	686
421.	Schering-Plough	Madison, N.J.	684
422.	Household International	Prospect Hts., Ill.	680
423.	Colorado Fire & Police	Englewood	678
424.	Op. Eng. #18	Cleveland	678
425.	Amalgamated Life	New York	675
426.	Battelle Memorial Inst.	Columbus, Ohio	675
427.	Gannett	Arlington, Va.	667
428.	Screen Actors/Produce	Burbank, Cal.	665
429.	Budd	Troy, Mich.	662
430.	Painters Int'l	Washington	661
431.	Parsons	Pasadena, Cal.	661
432.	Wayne County	Detroit	660
433.	McKesson	San Francisco	659
434.	AMP	Harrisburg, Pa.	658
435.	Food/Comm. Wkrs. Nat'l	Chicago	657
436.	La. Public Schools	Baton Rouge, La.	657
437.	Southland	Dallas	657
438.	Missouri Local Gov't	Jefferson City	656
439.	MITRE	Bedford, Mass.	652
440.	Aerospace	El Segundo, Cal.	650
441.	Coastal	Houston	650
442.	Wal-Mart Stores	Bentonville, Ark.	649
443.	Mayo Clinic	Rochester, Minn.	648
444.	Teamsters #710	Chicago	648
445.	Marriott	Washington	643
446.	Nalco Chemical	Naperville, Ill.	643
447.	Mars	McLean, Va.	642
448.	UFCW #459	Atlanta	642
449.	RSSI	New York	633
450.	Amer. Fed.-Musicians	New York	622
451.	Burlington Industries	Greensboro, N.C.	622
452.	Calif. Iron Wkrs.	San Marino	622
453.	PacifiCorp.	Portland, Ore.	622
454.	Allegheny Power	New York	620
455.	New England Electric	W'b'ough, Mass.	614
456.	New York State E&G	Ithaca	613
457.	Bridgestone/Firestone	Chicago	610
458.	UFCW-Nat'l HQ	Washington	608
459.	GCIU-Employer	El Monte, Cal.	605
460.	CPC International	Englew'd Cl., N.J.	603
461.	Wickes	San. Monica, Cal.	602
462.	Peat Marwick Main	Montvale, N.J.	601
463.	Chicago Laborers	Forest Park, Ill.	600
464.	San Diego G&E	San Diego	596
465.	Tektronix	Beaverton, Ore.	595
466.	Elec. Wkrs. Int'l HQ	Washington	594
467.	Washington Post	Washington	592
468.	GCIU Inter-Local	Chicago	591
469.	Service Empl. #32B/32J	New York	586
470.	Union Electric	St. Louis	584
471.	McGraw-Hill	New York	582
472.	Florida Progress	St. Petersburg	579
473.	Comm. Wkrs./Int'l Typo.	Colorado Springs	578

Ranking of funds/sponsors 201-1,000

Assets in $ millions

Rank	Fund/sponsor	Location	Assets
474.	Wis. Electric Power	Milwaukee	578
475.	Lear Siegler	Livingston, N.J.	577
476.	Houston Firemen	Houston	575
477.	Sara Lee	Chicago	575
478.	Beazer Materials & Svc.	Pittsburgh	572
479.	Ohio Carpenters	Cleveland	572
480.	White Consolidated	Cleveland	570
481.	Longshoremen ILA, Int'l	New York	567
482.	Beatrice	Chicago	565
483.	Sandoz	New York	562
484.	Houston Industries	Houston	561
485.	Carpenters, Chic. Dist.	Chicago	560
486.	Op. Engrs. #324	Birm'ham, Mich.	555
487.	Avon Products	New York	553
488.	Air Products & Chem.	Allentown, Pa.	552
489.	Arthur D. Little	Cambridge,Mass.	550
490.	Laborers & Retirement	Chicago	549
491.	Paper Industry Union	Nashville, Tenn.	549
492.	Food/Comm. Wkrs. #27	Baltimore	548
493.	Michigan Consol. Gas	Detroit	548
494.	Dallas Police & Fire	Dallas	544
495.	EG&G	Wellesley, Mass.	542
496.	Carolina Power & Light	Raleigh, S.C.	540
497.	Teamsters #705	Chicago	540
498.	Norton	Worcester, Mass.	539
499.	H.J. Heinz	Pittsburgh	537
500.	Premark	Deerfield, Ill.	536
501.	Great Northern Nekoosa	Norwalk, Conn.	535
502.	Pitney Bowes	Stamford, Conn.	535
503.	Borg-Warner	Chicago	533
504.	Inter-Amer. Dev. Bank	Washington	533
505.	B.F. Goodrich	Akron, Ohio	532
506.	Atlanta General Empl	Atlanta	531
507.	Mercantile Stores	New York	530
508.	Tribune	Chicago	529
509.	Chicago Firemen	Chicago	522
510.	Fresno County	Fresno, Cal.	522
511.	Transco Energy	Houston	522
512.	Centel	Chicago	520
513.	Phelps Dodge	Phoenix, Ariz.	515
514.	Walgreen	Deerfield, Ill.	515
515.	F.W. Woolworth	New York	515
516.	Hospital Corp.	Nashville, Tenn.	514
517.	Alcan Aluminium	Cambridge,Mass.	513
518.	Andersen	Bayport, Minn.	512
519.	Cargill	Minneapolis	510
520.	Longshore/ILWU/PMA	San Francisco	510
521.	Westinghouse Hanford	Richland, Wash.	506
522.	Pennwalt	Philadelphia	504
523.	Cincinnati G&E	Cincinnati	503
524.	Fort Worth Employees	Fort Worth	503
525.	Houston Policemen	Houston	503
526.	Northern Telecom	Nashville, Tenn.	502
527.	Seattle City	Seattle	502
528.	Sherwin-Williams	Cleveland	502
529.	American Standard	New York	500
530.	Northern Illinois Gas	Aurora, Ill.	500
531.	Siemens Capital	New York	500
532.	Teamster Affiliates	Washington	500
533.	Timken	Canton, Ohio	500
534.	Ventura County	Ventura, Cal.	500
535.	Boc Group	Murray Hill, N.J.	498
536.	Directors Guild	Los Angeles	497
537.	Moore Business Forms	Glenview, Ill.	497
538.	Amer. Home Products	New York	494
539.	Thiokol	Ogden, Utah	493
540.	Laborers Int'l HQ	Washington	492
541.	Cleveland-Cliffs	Cleveland	491
542.	Houston Municipal	Houston	491
543.	Fairfax County	Fairfax, Va.	487
544.	USG	Chicago	485
545.	Missouri Highway Empl.	Jefferson City	484
546.	Stanley Works	N. Britain, Conn.	484
547.	Carpenter Technology	Reading, Pa.	482
548.	Pittsburgh Nat'l Bank	Pittsburgh	482
549.	Amstar	Stamford, Conn.	479
550.	Food/Comm., Butchers	Oakland, Cal.	479
551.	Major League Players	New York	479
552.	Long Island Lighting	Hicksville, N.Y.	477
553.	Delmarva P&L	Wilmington, Del.	474
554.	S. Calif. Elec. Wkrs.	Los Angeles	473
555.	Perkin-Elmer	Norwalk, Conn.	470
556.	Denver Employees	Denver	469
557.	Varian Associates	Palo Alto, Cal.	469
558.	A.O. Smith	Milwaukee	467
559.	Colorado Public Service	Denver	462
560.	N. Indiana Public Svc.	Hammond, Ind.	460
561.	W. Pa. Teamsters	Pittsburgh	460
562.	Becton Dickinson	Frank. Lake,N.J.	458
563.	Aon	Chicago	457
564.	Boy Scouts	Irving, Texas	455
565.	Quantum Chemical	New York	455
566.	ICI Americas	Wilmington, Del.	450
567.	UFCW-Midwest	Chicago	450
568.	Western Union	Up. Sad. Riv. N.J.	450
569.	Rohr Industries	Chula Vista, Cal.	449
570.	San Joaquin County	Stockton, Cal.	448
571.	San Mateo County	Redw'd City,Cal.	445
572.	Briggs & Stratton	Milwaukee	444
573.	Elec. Contractors	Chicago	442
574.	M.E.B.A., Dist. 2	Brooklyn, N.Y.	441
575.	Bull HN Information	Billerica, Mass.	440
576.	Minneapolis Teachers	Minneapolis	440
577.	S. Calif. Laborers	Los Angeles	439
578.	Principal Mutual Life	Des Moines, Iowa	439
579.	Joseph E. Seagram	New York	439
580.	R.H. Macy	New York	437
581.	Alaska Teamsters	Anchorage	437
582.	V F	Reading, Pa.	436
583.	Belk/Leggett Stores	Charlotte, N.C.	435
584.	Nat'l Telephone Co-op	Washington	434
585.	Roadway Services	Akron, Ohio	431
586.	Minnesota Teachers	Minneapolis	430
587.	Springs Industries	Fort Mill, S.C.	430
588.	Flint City	Flint, Mich.	429
589.	Memphis Light/Gas	Memphis, Tenn.	428
590.	Philadelphia Carpenters	Philadelphia	427
591.	N.Y. State Teamsters	Utica	426
592.	Brooklyn Union Gas	Brooklyn, N.Y.	424
593.	Hearst	New York	424
594.	Teamsters #282	Elmont, N.Y.	424
595.	Oklahoma Fighters	Oklahoma City	420
596.	Parker Hannifin	Cleveland	420
597.	Rochester G&E	Rochester, N.Y.	420
598.	Hotel/Rest. #165/226	Las Vegas	418
599.	Boston Edison	Boston	417
600.	Newell	Freeport, Ill.	417
601.	Seafarers Pension	Cmp Sprngs,Md.	416
602.	S. Calif. Rapid Transit	Los Angeles	414
603.	Reader's Digest	Pleasantville,N.Y.	411
604.	Burroughs Wellcome	Res. Tri., N.C.	410
605.	Geo. A. Hormel	Austin, Texas	409
606.	Johnson & Higgins	New York	409
607.	Bricklayers/Trowel Int'l	Washington	407
608.	Cincinnati Milacron	Cincinnati	406
609.	TPF&C	Philadelphia	406
610.	Clark Equipment	South Bend, Ind.	405
611.	MASCO	Taylor, Mich.	404
612.	MCI Communications	Washington	403
613.	Op. Eng. #15	New York	403
614.	Western Metal Industry	Seattle	401
615.	Carter Hawley Hale	Los Angeles	400
616.	Dresser Industries	Dallas	400
617.	Henley Group	La Jolla, Cal.	400
618.	Lincoln National	Fort Wayne, Ind.	400
619.	Gates Rubber	Denver	397
620.	Hartford City	Hartford, Conn.	397
621.	Building Trades United	Elm Grove, Wis.	396
622.	S. Calif. Pipe Trades	Los Angeles	396
623.	Oklahoma Police	Oklahoma City	394
624.	Chicago Sanitary District	Chicago	392
625.	Electronic Data Systems	Irving, Texas	391
626.	Kern County	Bakersfield, Cal.	390
627.	Trinova	Maumee, Ohio	390
628.	McKinsey	New York, N.Y.	389
629.	Nat'l Industrial Group	Newark, N.J.	389
630.	Sheet Metal Wkrs. #108	Los Angeles	388
631.	Gerber Products	Fremont, Mich.	387
632.	Detroit Carpenters	Ferndale, Mich.	385
633.	Mass. State Carpenters	Wilmington	385
634.	Wash. Area Transit	Washington	385
635.	IBEW #1547	Anchorage	378
636.	Equifax	Atlanta	378
637.	Royal Indemnity	Charlotte, N.C.	378
638.	Williams	Tulsa, Okla.	378
639.	Food/Comm. Meatcut	Cypress, Cal.	377
640.	Phoenix City	Phoenix, Ariz.	376
641.	Vulcan Materials	Birmingham, Ala.	376
642.	Endata	Nashville, Tenn.	375
643.	Ohio Laborers	Columbus, Ohio	375
644.	Producer-Writers Guild	Burbank, Cal.	375
645.	St. Louis Public School	St. Louis	375
646.	Building Services	San Francisco	373
647.	Miami Firefighters/Police	Miami	373
648.	Salt River Project	Phoenix, Ariz.	373
649.	N. Calif. Sheet Metal	San Francisco	372
650.	Washington G&E	Washington	371
651.	Alexander & Alexander	Owings Mills, Md.	369
652.	Austin City	Austin, Texas	369
653.	Fresno City	Fresno, Cal.	368
654.	Ryder Systems	Miami	368
655.	Savings Banks Empl	Woburn, Mass.	367
656.	Tampa Fire & Police	Tampa	367
657.	Teamsters-Philadelphia	Philadelphia	367
658.	Laborer/Mason Tenders	New York	366
659.	Libbey-Owens-Ford	Toledo, Ohio	364
660.	Arlington County	Arlington, Va.	361
661.	Automotive Industries	Oakland, Cal.	361
662.	First Bank System	Minneapolis	361
663.	Agway	Syracuse, N.Y.	360
664.	Hershey Foods	Hershey, Pa.	360
665.	Kansas City Employees	Kansas City, Mo.	360
666.	Western Pa. Laborers	Pittsburgh	360
667.	Potlatch	Walnut Crk, Cal.	359
668.	McDonald's	Oak Brook, Ill.	357
669.	KPL Gas Service	Topeka, Kan.	356
670.	Harris Pump & Supply	Pittsburgh	354
671.	Baton Rouge Police	Baton Rouge, La.	353
672.	La. Municipal Police	Baton Rouge, La.	353
673.	Potomac Electric Power	Washington	353
674.	Consolidated Paper	Wis. Rapids, Wis.	352
675.	Food/Comm. Wkrs. 876	Mad. Hgts,Mich.	352
676.	Comm. Clearing House	Riverwoods, Ill.	351
677.	Daughters of Charity	St. Louis	350
678.	Elec. Products Industry	Flushing, N.Y.	350
679.	Graybar Electric	St. Louis	350
680.	Gulf State Utilities	Beaumont, Texas	350
681.	S.C. Johnson	Racine, Wis.	350
682.	S. Calif. Plasterers	El Monte	350
683.	Rio Grande Industries	Denver	350
684.	Zenith Electronics	Chicago	350
685.	Ernst & Young	New York	346
686.	Op. Eng. #825	Newark, N.J.	346
687.	Square D	Palatine, Ill.	345
688.	St. Louis Police	St. Louis	345
689.	Hawaiian Electric	Honolulu	344
690.	Peabody Holding	St. Louis	342
691.	Cultural Institutions	New York	341
692.	Maryland Supplemental	Baltimore	340
693.	Insurance Support Org.	New York	339
694.	Kerr-McGee	Oklahoma City	338
695.	Sacramento City	Sacramento, Cal.	335
696.	Plumbers/Pipefit. #597	Chicago	334
697.	Bank of New York	New York	332
698.	MAPCO	Tulsa, Okla.	332
699.	Rochester Telephone	Rochester, N.Y.	331
700.	Longshore., STA-ILA	Baltimore	330
701.	Nat'l Fuel Gas	Buffalo, N.Y.	329
702.	Mass. Laborers	Newton, Mass.	328
703.	Nat'l Maritime Union	New York	328
704.	Adolph Coors	Golden, Colo.	327
705.	Louisiana Parochial	Natchitoches, La.	327
706.	Cyclops	Pittsburgh	326
707.	Humana	Louisville, Ky.	326
708.	Carnation	Los Angeles	325
709.	Int'l Minerals/Chemicals	Northbrook, Ill.	325
710.	Knight-Ridder	Miami	325
711.	Publix Super Markets	Lakeland, Fla.	325
712.	S. Calif. Permanente	Pasadena	324
713.	Stone & Webster	New York	324
714.	Nat'l Football League	New York	323
715.	Outboard Marine	Waukegan, Ill.	323
716.	Primerica	Baltimore	323
717.	Carpenters-West. Wash.	Seattle	322
718.	Loral	New York	322
719.	Reliance Electric	Cleveland	320
720.	First Boston	New York	319
721.	Maritime Assoc.-ILA	Houston	319
722.	Oakland County	Pontiac, Mich.	319
723.	Upholsterers, Int'l HQ	Philadelphia	319
724.	Duquesne Light	Pittsburgh	318
725.	Lowe's Cos.	N. Wilkesb., N.C.	317
726.	Blue Cross/Shield-Mich.	Detroit	315
727.	New York Times	New York	315
728.	Northwest'n Steel/Wire	Sterling, Ill.	315
729.	Morton International	Chicago	314
730.	Vermont State	Montpelier	314
731.	Health Employers	St. Paul, Minn.	313
732.	Amer. Insurance Assoc.	New York	312
733.	Norfolk City	Norfolk, Va.	311
734.	Illinois Power	Decatur, Ill.	310
735.	Fireman's Fund	Novato, Cal.	309
736.	Pechiney	Greenwch, Conn.	308
737.	Sonoco Products	Hartsville, S.C.	308
738.	Carpenters Int'l HQ	Washington	306
739.	Elf Acquitaine	Stamford, Conn.	306
740.	Bowater	Darien, Conn.	305
741.	Chicago Park District	Chicago	305
742.	Commonwealth Energy	Cambridge,Mass.	305
743.	Wis. Public Service	Green Bay, Wis.	305
744.	Birmingham City	Birmingham, Ala.	304
745.	Portland General	Portland, Ore.	303
746.	Nestle Food	Purchase, N.Y.	302

Ranking of funds/sponsors 201-1,000

Assets in $ millions

Rank	Fund/sponsor	Location	Assets
747.	Enserch	Dallas	300
748.	Fairfax County Schools	Springfield, Va.	300
749.	Food/Comm. Wkrs #7	Wheat Ridge, Co.	300
750.	Fort Howard Paper	Green Bay, Wis.	300
751.	Paine Webber	Weehawken, N.J.	300
752.	Temple Inland	Diboll, Texas	300
753.	North. Jersey Iron Wkrs	Newark, N.J.	298
754.	Illinois Tool Works	Chicago	297
755.	Laborer #341/942/1331	Anchorage	296
756.	South Carolina G&E	Columbia, S.C.	296
757.	Sonat	Birmingham, Ala.	295
758.	Ball	Muncie, Ind.	294
759.	Dow Jones	Princeton, N.J.	293
760.	Amfac	San Francisco	292
761.	Alco Standard	Valley Forge, Pa.	291
762.	Laborers #472/172	Newark, N.J.	291
763.	Science Applications	San Diego	291
764.	Dillon	Hutchinson, Kan.	290
765.	Plumbers #525	Las Vegas	290
766.	DeKalb County	Decatur, Ga.	289
767.	Scana	Columbia, S.C.	289
768.	Lukens	Coatesville, Pa.	288
769.	Marin County	San Rafael, Cal.	288
770.	Ohio Casualty Insurance	Hamilton, Ohio	287
771.	Conagra	Omaha, Neb.	286
772.	Arvin Industries	Columbus, Ind.	285
773.	Santa Barbara County	S. Barbara, Cal.	285
774.	Syntex	Palo Alto, Cal.	285
775.	U.S. Fidelity & Guaranty	Baltimore	285
776.	St. Louis City	St. Louis	284
777.	Nat'l Gypsum	Dallas	281
778.	Textile Workers-Nat'l	New York	281
779.	Carpenters, West. Pa.	Pittsburgh	280
780.	A.G. Edwards	St. Louis	280
781.	Federal-Mogul	Detroit	280
782.	Tecumseh Products	Tecumseh, Mich.	280
783.	Interco	St. Louis	279
784.	Revlon	New York	279
785.	St. Paul Teachers	St. Paul, Minn.	276
786.	Wrigley	Chicago	276
787.	Iron Workers-Texas	Houston	275
788.	Illinois Carpenters	Geneva, Ill.	274
789.	Wichita City	Wichita, Kan.	273
790.	J.M. Huber	Edison, N.J.	272
791.	San Antonio Fire/Police	S. Antonio, Texas	272
792.	S'western Public Svc.	Amarillo, Texas	272
793.	Pennsylvania Municipal	Harrisburg, Pa.	271
794.	Walt Disney	Burbank, Calif.	270
795.	New Orleans Steamship	New Orleans	269
796.	Simpson Investment	Seattle	269
797.	Alltell	Little Rock, Ark.	268
798.	Capital Holding	Louisville, Ky.	268
799.	Amerada Hess	New York	265
800.	Machinists I.A.M. #9	Bridgeton, Mo.	264
801.	IBEW #332	San Jose, Calif.	263
802.	Banco Popular	San Juan, P.R.	260
803.	Harnischfeger	Brookfield, Wis.	260
804.	Miami Beach City	Miami Beach	260
805.	Montgomery Co. Educ.	Rockville, Md.	260
806.	Mass. General Hospital	Boston	259
807.	Knoxville City	Knoxville Tenn.	258
808.	Michelin Tire	Greenville, S.C.	257
809.	GATX	Chicago	256
810.	Laborers, Central	Jacksonville, Ill.	255
811.	Shelby County	Memphis, Tenn.	255
812.	Steelworkers, Nat'l HQ	Pittsburgh	254
813.	Teco Energy	Tampa	254
814.	Gould	Eastlake, Ohio	253
815.	Pittston	Greenwch, Conn.	252
816.	Puget Sound P&L	Bellevue, Wash.	252
817.	Hotel/Restaurant #1	Naperville, Ill.	251
818.	Alaska Laborers	Anchorage	251
819.	Oakland Police/Fire	Oakland, Calif.	251
820.	Actors Eq./Screen Extra	New York	250
821.	Blue Cross/Shield Iowa	Des Moines, Iowa	250
822.	Carpenters #1644	Minneapolis	250
823.	Continental Grain	New York	250
824.	Elec. Workers #1186	Honolulu	250
825.	Harcourt Brace	Orlando, Fla.	250
826.	Loews	New York	250
827.	Marion Labs	Kansas City, Mo.	250
828.	Service Empl. #144	New York	249
829.	Intel	Santa Clara, Cal.	248
830.	Laborers, Indiana	Terre Haute, Ind.	248
831.	American Water Works	Voorhees, N.J.	247
832.	Chicago City	Chicago	247
833.	Grand Union	Wayne, N.J.	246
834.	Food/Comm. Wkr. #576	Kansas City, Mo.	245
835.	Levi Strauss	San Francisco	245
836.	Arkla	Shreveport, La.	244
837.	K.C. Public Schools	Kansas City, Mo.	244
838.	ARA Services	Philadelphia	241
839.	Great A&P Tea	Montvale, N.J.	241
840.	S. Cal. Ret. Clerks/Drug	Los Angeles	241
841.	Food Lion	Salisbury, N.C.	240
842.	Marmon Group	Chicago	240
843.	Atlantic City Electric	Pleasantville, N.J.	239
844.	Charter	Jacksonville, Fla.	239
845.	ONEOK	Tulsa, Okla.	239
846.	Willamette Industries	Portland, Ore.	239
847.	Iron Workers-S. Ohio	Dayton, Ohio	238
848.	Great Lakes Carbon	Briarcliff Manor	237
849.	Moorman Mfg.	Quincy, Ill.	237
850.	Sisters of Providence	Seattle	236
851.	Greater Cleve. Hosp.	Cleveland	235
852.	Harsco	Camp Hill, Pa.	235
853.	United Services Auto	San Antonio, Tex.	234
854.	Rubbermaid	Wooster, Ohio	233
855.	AMCA International	Charlotte, N.C.	232
856.	Kansas City Police	Kansas City, Mo.	232
857.	PACCAR	Bellevue, Wash.	232
858.	Iron Wkrs. #40,361,417	New York	231
859.	Media General	Richmond, Va.	231
860.	NVF	Miami Beach	231
861.	Op. Engineers #542	Norristown, Pa.	231
862.	Cooper Tire & Rubber	Findlay, Ohio	230
863.	Prince George's County	Up. Marlb., Md.	229
864.	Super Valu Stores	Minneapolis	229
865.	Brown Forman	Louisville, Ky.	228
866.	Machinists, Auto #289	Seattle	228
867.	Sisters of Mercy/Detroit	Farmington Hills	228
868.	U.S. Borax & Chemical	Los Angeles	227
869.	Cal. State Auto Assoc.	San Francisco	226
870.	Cox Enterprises	Atlanta	225
871.	TBG	New York	225
872.	A.B. Dick	Chicago	224
873.	Wyatt	Washington	223
874.	Amica Mutual	Providence, R.I.	222
875.	Dennison Mfg.	Fram'ham, Mass.	222
876.	Machinists #701	Chicago	222
877.	SKF USA	King/Prussia, Pa.	221
878.	Allegheny Int'l	Pittsburgh	220
879.	S. Calif. Auto Club	Los Angeles	220
880.	Leo Burnett	Chicago	220
881.	Dynacast	York. Hgts, Ohio	220
882.	Hotel Trades Council	New York	220
883.	Stanislaus County	Modesto, Calif.	220
884.	N.J. Trucking Empl.	Union City, N.J.	220
885.	Witco	New York	220
886.	Arkansas Highway	Little Rock, Ark.	219
887.	Babcock Industries	Fairfield, Conn.	218
888.	Diversified Energies	Minneapolis	218
889.	Jack Eckerd	Clearwater, Fla.	218
890.	Kansas City P&L	Kansas City, Mo.	217
891.	Omaha Public Power	Omaha, Neb.	217
892.	Signode	Glenview, Ill.	216
893.	Allegheny County	Pittsburgh	215
894.	Avery International	Pasadena, Calif.	215
895.	Chubb	New York	215
896.	Mid-Amer. Iron Workers	Lansing, Ill.	215
897.	SPX	Muskegon, Mich.	215
898.	Anne Arundel County	Annapolis, Md.	214
899.	Iron Workers #25	Novi, Mich.	214
900.	Foxboro	Foxboro, Mass.	213
901.	Ohio Highway Patrol	Columbus	211
902.	Indianapolis P&L	Indianapolis	210
903.	Penn Central	Cincinnati	210
904.	ADT Security Systems	Parsippany, N.J.	208
905.	Anchorage Police/Fire	Alaska	208
906.	Elec. Wkrs. #103	Dorchestr, Mass.	208
907.	Castle & Cook	Los Angeles	207
908.	YWCA	New York	207
909.	Archer Daniels Midland	Decatur, Ill.	206
910.	H.E. Butt Grocery	San Antonio	206
911.	Engelhard	Edison, N.J.	206
912.	Oklahoma G&E	Oklahoma City	206
913.	Va. Joint Teamster #83	Richmond, Va.	206
914.	Copley Press	La Jolla, Calif.	205
915.	Painters #9	New York	205
916.	St. Louis Firemen	St. Louis	205
917.	Op. Engineers #66	Monroeville, Pa.	204
918.	IBEW #58	Detroit	203
919.	Lubrizol	Wickliffe, Ohio	203
920.	Plumbers/Steam. #420	Philadelphia	203
921.	White Castle Systems	Columbus, Ohio	203
922.	Kennametal	Latrobe, Pa.	202
923.	Philadelphia Laborers	Philadelphia	202
924.	Genuine Parts	Atlanta	201
925.	Limited	Columbus, Ohio	201
926.	Richmond Supplemental	Richmond, Va.	201
927.	Twin Cities Pipe Trades	St. Paul, Minn.	201
928.	Brown Group	St. Louis	200
929.	Bufcor	St. Petersburg	200
930.	W.W. Grainger	Skokie, Ill.	200
931.	Holiday	Memphis, Tenn.	200
932.	Iron Wkrs-Philadelphia	Philadelphia	200
933.	League Voluntary Hosp.	New York	200
934.	Mercedes-Benz	Montvale, N.J.	200
935.	Mine Safety Appliances	Pittsburgh	200
936.	Minneapolis Police	Minneapolis	200
937.	Nash./Davidson County	Nashville, Tenn.	200
938.	Omaha Schools	Omaha, Neb.	200
939.	Plumbers/Steam. #638	New York	200
940.	Providence Employees	Providence, R.I.	200
941.	Rexnord	Brookfield, Wis.	200
942.	Tacoma Employees	Tacoma, Wash.	200
943.	Teamsters, Mid-Jersey	New Brunswick	200
944.	Tulare County	Visalia, Calif.	200
945.	UAW National HQ	Detroit	200
946.	Walter Industries	Tampa, Fla.	200
947.	Teamsters #641	Seacaucus, N.J.	199
948.	Comm. Wkrs. of Amer.	Washington	198
949.	Seattle Iron Wkrs.	Seattle	197
950.	Tampa General Empl.	Tampa	196
951.	Tandy/Radio Shack	Fort Worth,Tex.	196
952.	Sheet Metal Wkrs. #73	Chicago	195
953.	Sonoma County	Santa Rosa, Cal.	195
954.	Supermarkets General	Woodbridge, N.J.	195
955.	N.J.Carpenters	Madison, N.J.	194
956.	Central Illinois Light	Peoria, Ill.	194
957.	El Paso City	El Paso, Texas	194
958.	Fleming	Oklahoma City	194
959.	Kaman	Bloomfield, Conn.	194
960.	Op. Eng. #428	Phoenix, Ariz.	194
961.	Op. Eng. #701	Portland, Ohio	194
962.	Amer. Family Mutual	Madison, Wis.	193
963.	American Greetings	Cleveland	193
964.	Salomon Brothers	New York	193
965.	Kimball Int'l	Jasper, Ind.	192
966.	Koch Industries	Wichita, Kan.	192
967.	Laborers, Montana	Great Falls, Mont.	192
968.	Yellow Freight	Overlnd Pk., Kan.	192
969.	Tallahassee City	Tallahassee, Fla.	191
970.	Indiana Farmers Mutual	Indianapolis	190
971.	Omnicom Group	New York	190
972.	Longs Drug Stores	Walnut Crk, Cal.	189
973.	Union Texas Petroleum	Houston	189
974.	Genesee County	Flint, Mich.	188
975.	Sterling Drug	New York	188
976.	Plumbers 444/159/342-3	San Francisco	186
977.	A.E. Staley Mfg.	Decatur, Ill.	186
978.	Auto Workers #65	New York	185
979.	Crane	New York	185
980.	Fairchild Industries	Chantilly, Va.	185
981.	Food/Comm.Wkrs. 464	Little Falls, N.J.	185
982.	Maritime Union #333	Staten Island	185
983.	Amsted Industries	Chicago	184
984.	Asbestos Wkrs. Int'l	Washington	184
985.	Consol. Freightways	Palo Alto, Calif.	184
986.	Fred S. James	New York	184
987.	Detroit Medical Center	Detroit	183
988.	Fieldcrest Cannon	Eden, N.Y.	183
989.	La. Municipal Empl.	Baton Rouge, La.	183
990.	United States Sugar	Clewiston, Fla.	183
991.	Hiram Walker	Detroit	183
992.	Blue Cross/Mass.	Boston	182
993.	Dayton P&L	Dayton, Ohio	182
994.	Louisiana Sheriffs	Monroe, La.	182
995.	S. Calif. Lumber Ind.	El Monte, Calif.	182
996.	Wang Labs	Lowell, Mass.	182
997.	Hartford Hospital	Hartford, Conn.	181
998.	InterPublic	New York	181
999.	CertainTeed	Valley Forge, Pa.	180
1000.	Curtiss-Wright	Lyndhurst, N.J.	180
	Total		**440,208**

On the following pages, *Pensions & Investments* presents sketches of the 200 largest pension funds in the United States. The profiles include each fund's asset allocation, investment managers and key personnel.

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A

Abbott Laboratories

	($ millions)
Total assets	1,923
Defined benefit	904
Defined contribution	1,019
401(k)	1,019
Employer DB contributions	0
Benefit payments	22
Employer DC contributions	20
Defined benefit asset mix:	
Stocks	45%
Fixed income	55%
Defined contribution asset mix:	
Company stock	90%
GICs/BICs	10%

ABBOTT PARK, Ill. — As of Sept. 30, Abbott Laboratories' total employee benefit assets increased 25.7% to $1.923 billion from $1.53 billion a year earlier. Defined benefit assets increased 17.4% during the same period, to $904 million from $770 million. Defined contribution assets increased 34.1%, to $1.019 billion from $760 million.

Equity managers: Domestic — Hagler, Mastrovita & Hewitt; Jennison; and RCM.

Fixed-income manager: Domestic — RCM.

Continental Bank is master trustee.

A.G. Olsen, director, oversees the investment management of the fund.

Aetna Life & Casualty Co.

	($millions)
Total assets	2,703
Defined benefit	1,730
Defined contribution	973
401(k)	947
Other	26
Employer DB contributions	0
Benefit payments	100
Internally managed assets:	
Total DB	1,730
Total DC	973
Defined benefit asset mix:	
Stocks	64%
Fixed income	28%
Cash equivalents	1%
Real estate equity	6%
Mortgages	1%
Defined contribution asset mix:	
Company stock	30%
Other stock	8%
Other	62%

HARTFORD, Conn. — As of Sept. 30, Aetna Life & Casualty Co.'s total employee benefit assets increased 20.6% to $2.703 billion from $2.242 billion a year earlier. Defined benefit assets increased 18.3% during the same period to $1.73 billion from $1.462. Total defined contribution plan assets increased 24.7% to $973 million from $780 million.

The key personnel overseeing the plan are P.R. Roberts, senior vice president-investments, and R.A. Smith, senior vice president-pensions and financial services.

Retirement Systems of Alabama

	($ millions)
Total assets*	7,884
Defined benefit	7,884
Employer DB contributions	299
Benefit payments	330

**book value*

Internally managed assets	7,884
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	9%
Fixed income	52%
Cash equivalents	10%
Mortgages	22%
Mortgage-backed securities	7%

MONTGOMERY, Ala. — As of Sept. 30, the Retirement Systems of Alabama's total employee benefit assets increased 12.6% to $7.884 billion from $7 billion a year earlier. All assets are defined benefit and managed internally.

Key personnel overseeing the investment management of the fund are David G. Bronner, chief executive officer; Hunter Reaves, director of fixed income; and Cheryl Duke, director of equities.

Alaska Retirement Systems

	($ millions)
Total assets	4,124
Defined benefit	4,124
Employer DB contributions	50
Internally managed assets	2,418
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	36%
Fixed income	42.5%
Cash equivalents	11%
Real estate equity	5.8%
Mortgages	4.7%

JUNEAU, Alaska — As of Sept. 30, the Alaska Retirement Systems' total employee benefit assets increased 18.6% to $4.124 billion from $3.476 billion a year earlier. All assets are in defined benefit plans.

Equity managers: Domestic — Fred Alger; IDS; INVESCO; Lehman Ark; Loomis, Sayles; Miller, Anderson & Sherrerd; State Street Bank; and United Capital Management.

International — Citicorp and J. P. Morgan.

Real estate managers: Aetna; Equitable; John Hancock; JMB; Karsten; J.P. Morgan; and Sentinel.

The master custodian is First Pennsylvania.

Key personnel overseeing the investment management of the fund are Milton Barker, deputy commissioner; Michael Cheung, and Steve Verschoor, investment officers.

Allied Signal Inc.

	($ millions)
Total assets*	7,000
Defined benefit	5,000
Defined contribution	2,000
Employer DB contributions	70
Benefit payments	260

**as of June 30, 1989*

Internally managed assets:	
Total DB	1,259
Defined benefit asset mix:	
Stocks	45%
Fixed income	33%
Cash equivalents	12%
Real estate equity	8%
Other	2%

MORRISTOWN, N.J. — As of June 30, Allied Signal Inc.'s total employee benefit assets increased 5.9% to $7 billion from $6.609 billion nine months earlier. Defined benefit assets increased 3.5% during the same period, to $5 billion from $4.833 billion. Defined contribution plan assets increased 12.6% to $2 billion from $1.776 billion.

Equity managers: Domestic — Bankers Trust; Delaware Investments; Johnson, Valliant & Broadfoot; John A. Levin; Lincoln Capital; Lord, Abbett; Donald Smith; Verus Capital; and Weiss, Peck & Greer.

International — Batterymarch; Arnhold & S. Bleichroeder; and Morgan Grenfell.

Fixed-income managers: Domestic — Delaware; W.R. Huff; and J.P. Morgan.

Real estate managers: Aetna; Copley; Hancock; MIG; PCA; Prudential; RREEF; Travelers; and TCW.

The master trustee and global custodian is Northern Trust.

Key personnel overseeing the in-

vestment management of the fund are Edward J. Tokar, vice president-investments; Mark E. Smith, senior portfolio manager; and Jay W. Burden, portfolio manager.

Aluminum Co. of America

	($ millions)
Total assets	3,200
Defined benefit	2,660
Defined contribution	540
401(k)	540
Employer DB contributions	160
Benefit payments	180
Employer DC contributions	20
Defined benefit asset mix:	
Stocks	21%
Fixed income	75%
Cash equivalents	2%
Real estate equity	2%
Defined contribution asset mix:	
Company stock	30%
Other stock	5%
GICs/BICs	65%

PITTSBURGH — As of Sept. 30, Aluminum Co. of America's total employee benefit assets increased 10.7% to $3.2 billion from $2.892 billion a year earlier. Defined benefit assets increased 10.8% during the same period, to $2.66 billion from $2.4 billion. During the same period, defined contribution plan assets increased 9.8% to $540 million from $492 million.

Equity managers: Domestic — Franklin Portfolio; Geewax, Terker; Rosenberg Institutional; State Street Bank; and Wells Fargo.

International — Capital Guardian and Mercator.

Fixed-income managers: Domestic — Massachusetts Financial; Mellon Bank; Prudential; STW Fixed Income.

International — Massachusetts Financial and Prudential.

Real estate managers: Coldwell Banker; Equitable; Hancock; and RREEF.

The master trustee and global custodian is Mellon Bank.

Key personnel overseeing the investment management of the fund are Joseph C. Pellegrino, director pension investments, and Donna S. Barr, trust investment analyst.

American Airlines

	($ millions)
Total assets	4,000
Defined benefit	2,000
Defined contribution	2,000
401(k)	400
Other	1,600
Employer DB contributions	130
Employer DC contributions	50
Internally managed assets:	
Total DB	250
Total DC	50
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	33%
Fixed income	60%
Cash equivalents	7%
Defined contribution asset mix:	
Other stock	75%
Fixed income	15%
Cash equivalents	10%

FORT WORTH, Texas — As of Sept. 30, American Airlines' total employee benefit assets increased 29% to $4 billion from $3.1 billion a year earlier. Defined benefit assets increased 29% during the same period, to $2 billion from $1.55 billion. Defined contribution assets also increased 29%, to $2 billion from $1.55 billion.

Equity managers: Domestic — Atlanta Capital; Barrow, Hanley; Capital Guardian; Cashman Farrell; Dreman; Dewey Square; Ganaucheau, Stupfel; Hotchkis and Wiley; Independence; NCNB-Texas; Penmark; and United Capital.

International — H.D. International; Morgan Grenfell; and Rowe Price-Fleming.

The master trustee is NCNB-Texas; the global custodian is Chase.

Key personnel overseeing the investment management of the fund are William F. Quinn, president-AMR Investment Services, and Dennis M. O'Hara, vice president-AMR Investment Services.

American Brands Inc.

	($ millions)
Total assets	1,684
Defined benefit	1,291
Defined contribution	393

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BP

Largest corporate funds

Fund	($ millions)
AT&T	42,700
General Motors	40,900
General Electric	28,912
IBM	25,775
Ford Motor	22,800
E.I. du Pont de Nemours	18,681
NYNEX	16,062
Ameritech	14,300
Bell Atlantic	13,635
BellSouth	12,843
GTE	12,423
Pacific Telesis	11,443
Boeing	11,001
USX	9,825
U S WEST	9,800
Eastman Kodak	9,500
Rockwell International	9,124
Lockheed	8,926
Southwestern Bell	8,334
United Technologies	8,261
Sears, Roebuck	8,101
Exxon	8,066
Shell Oil	7,840
McDonnell Douglas	7,589
Philip Morris	7,470
Total	**374,311**

Largest public funds

Fund	($ millions)
California Employees	54,000
New York City	45,422
New York State & Local	44,238
California State Teachers	30,335
New York State Teachers	28,130
New Jersey	24,526
Texas Teachers	23,500
Wisconsin State Board	20,033
Ohio Public Employees	19,305
Florida State Board	18,700
Ohio State Teachers	18,059
State of Michigan	17,948
North Carolina	16,791
Pennsylvania Schools	15,430
Washington State Board	12,660
Minnesota State Board	12,343
Oregon Public Employes	11,178
Maryland State Systems	11,065
Virginia Supplemental	10,244
Pennsylvania Employes	9,504
Los Angeles County	9,359
Colorado Employees	9,227
Georgia Teachers	8,90
Illinois Teachers	8,475
Tennessee Consolidated	8,075
Total	**487,455**

Largest miscellaneous funds

Fund	($ millions)
TIAA-CREF	81,000
University of California	12,900
United Nations Joint Staff	8,414
Federal Retirement Thrift	4,319
Illinois State Universities	3,845
United Methodist Church	3,566
World Bank	3,292
Tennessee Valley Authority	3,090
Southern Baptist	2,559
Presbyterian Church	2,400
Nat'l Rural Electric Co-op	2,304
Episcopal Church	1,837
Evangelical Lutheran	1,782
Total	**131,308**

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Profit-sharing	330
Thrift or savings	63

OLD GREENWICH, Conn. — As of Sept. 30, American Brands Inc.'s total employee benefit assets were $1.684 billion. Defined benefit assets were $1.291 billion; defined contribution assets, $393 million.

American Electric Power Service Corp.

	($ millions)
Total assets	1,789
Defined benefit	1,260
Defined contribution	529
Thrift/savings/401(k)	515
Other	14
Employer DB contributions	0
Benefit payments	47
Employer DC contributions	13

Hedging devices used:
Stock options
Stock index futures

Defined benefit asset mix:

Stocks	69%
Fixed income	20%
Cash equivalents	7%
Real estate equity	1%
Venture capital	3%

Defined contribution asset mix:

Company stock	27%
Other stock	13%
GICs/BICs	60%

COLUMBUS, Ohio — As of Sept. 30, American Electric Power Service Corp.'s total employee benefit assets increased 14.6% to $1.789 billion from $1.561 billion a year earlier. Defined benefit assets increased 18.6% during

Largest union funds

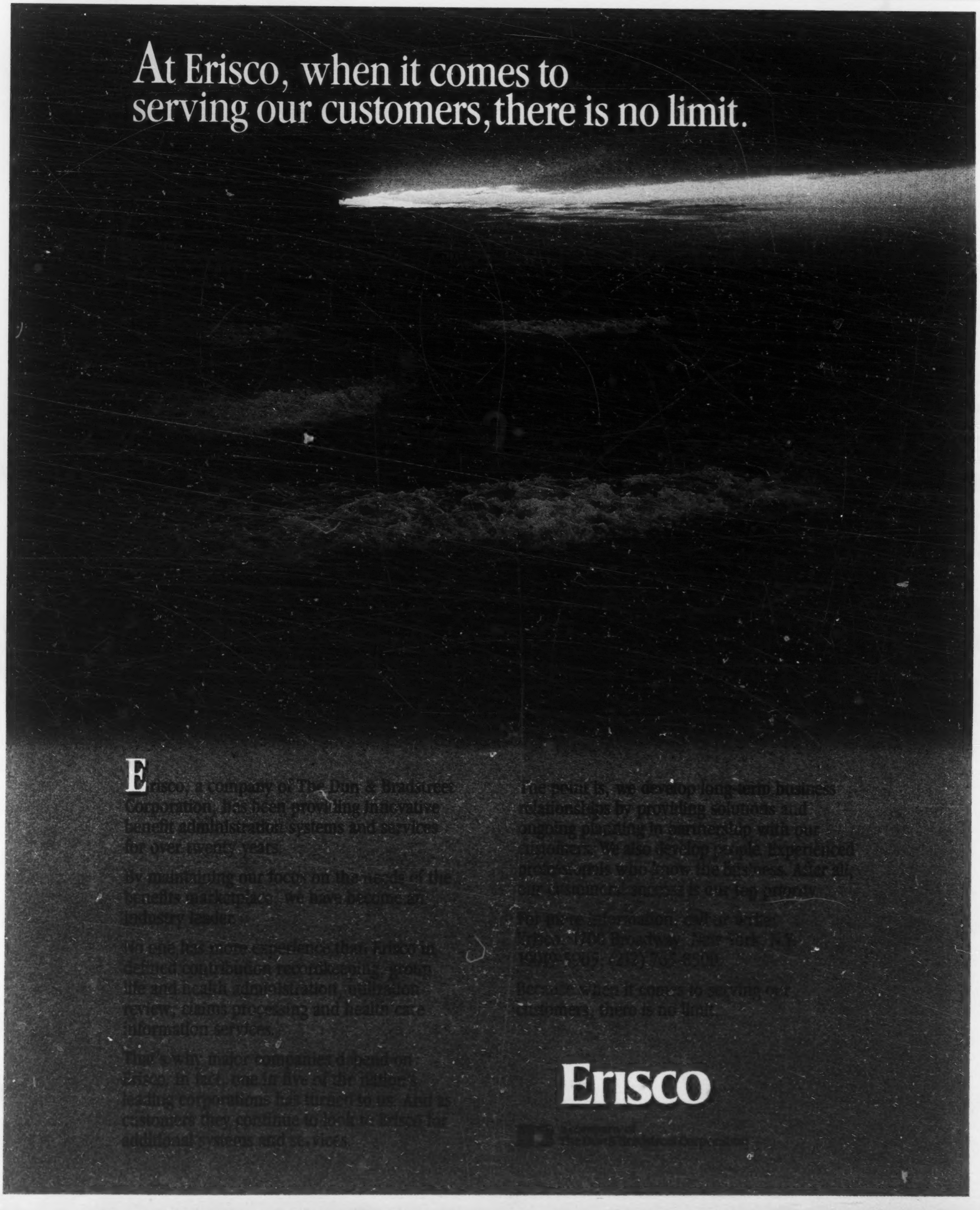
Fund	($ millions)
Teamsters, Central States	9,849
Teamsters, Western	9,084
UMWA	5,300
Nat'l Electrical Contractors	3,675
Hospital/Healthcare	2,241
Bakery & Confectionery	2,175
Operating Engineers	2,159
Southern California UFCW	2,133
Boilermaker/Blacksmith	2,132
I.A.M. National Pension	1,695
Plumbers National HQ	1,615
Total	**42,058**

Largest defined benefit plans

Fund	($ millions)
California Employees	54,000
New York City	45,422
New York State & Local	44,238
General Motors	35,500
AT&T	33,376
California State Teachers	30,335
New York State Teachers	28,130
General Electric	24,318
New Jersey	24,278
Texas Teachers	23,500
IBM	22,500
Wisconsin State Board	20,033
Ohio Public Employees	19,305
Florida State Board	18,700
Ford Motor	18,100
Ohio State Teachers	18,059
State of Michigan	17,948
North Carolina	16,791
Pennsylvania Schools	15,430
NYNEX	13,262
E.I. du Pont de Nemours	12,945
Washington State Board	12,660
Ameritech	12,100
Minnesota State Board	11,890
University of California	11,736
Total	**584,556**

Largest defined contribution plans

Fund	($ millions)
TIAA-CREF	81,000
AT&T	9,324
E.I. du Pont de Nemours	5,736
General Motors	5,400
Sears, Roebuck	5,127
Procter & Gamble	4,800
Ford Motor	4,700
General Electric	4,594
Federal Retirement Thrift	4,319
Exxon	4,252
Boeing	4,210
Shell Oil	4,140
IBM	3,275
Xerox	3,191
NYNEX	2,800
Chevron	2,790
Lockheed	2,679
Rockwell International	2,500
Philip Morris	2,310
BellSouth	2,300
Halliburton	2,270
United Technologies	2,256
Ameritech	2,200
Eastman Kodak	2,200
Texas Municipal	2,200
Total	**170,573**



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Top 200 funds with defined benefit assets managed internally

($ millions)

Fund	Total	Equities	Bonds	Short-term	Real estate	Other
California Employees	45,600	17,700	23,400	1,200	3,300	0
New York State & Local	36,919	15,968	16,690	1,273	399	2,589
New York State Teachers	25,374	13,748	9,047	745	0	1,834
New Jersey	24,278	11,818	8,283	997	0	3,180
Texas Teachers	23,500	10,000	11,000	200	0	2,300
General Electric	22,818	11,363	6,306	978	1,977	2,194
Wisconsin State Board	20,033	11,183	6,921	1,357	572	0
Ohio Public Employees	18,659	4,079	11,033	3,520	0	27
Ohio State Teachers	17,650	5,402	8,432	2,169	1,625	22
State of Michigan	17,341	7,033	4,892	3,350	885	1,181
California State Teachers	15,908	0	13,796	2,112	0	0
E.I. du Pont de Nemours	12,806	6,960	4,597	1,249	0	0
IBM	12,600	na	na	na	na	na
Florida State Board	11,979	3,837	5,598	1,793	751	0
University of California	11,736	8,295	3,327	114	0	0
North Carolina	10,764	0	9,036	11	0	1,717
USX	9,500	5,500	2,400	1,375	225	0
United Nations Joint Staff	8,414	3,634	3,074	750	956	0
Maryland State Systems	8,328	2,337	5,768	223	0	0
Colorado Employees	8,075	2,812	3,721	642	457	443
Tennessee Consolidated	8,075	2,749	4,058	476	0	792
Alabama Systems	7,884	729	4,106	786	12	2,251
South Carolina	7,072	0	6,447	625	0	0
Washington State Board	6,743	0	4,366	1,148	1,229	0
Texas Employees	5,969	1,621	4,175	173	0	0
Minnesota State Board	5,123	558	4,437	128	0	0
Prudential Insurance	4,691	2,408	1,385	370	484	44
Ameritech	3,550	1,100	650	800	1,000	0
Oregon Public Employes	3,505	0	2,978	57	470	0
Bethlehem Steel	3,125	970	1,910	220	0	25
General Dynamics	2,700	500	2,200	0	0	0
Sears, Roebuck	2,666	1,763	774	34	0	95
GTE	2,528	848	1,680	0	0	0
Metropolitan Life	2,446	616	1,507	0	323	0
Alaska Retirement Systems	2,418	0	1,754	471	0	193
Utah State Retirement	2,380	926	1,360	0	94	0
Textron	2,100	334	1,022	299	208	237
Union Carbide	2,059	499	1,445	0	61	54
Commonwealth Edison	2,030	1,076	868	86	0	0
AT&T	2,024	0	0	0	1,215	809
Grumman	2,010	850	710	450	0	0
Deere	1,900	1,415	485	0	0	0
New Mexico Educational	1,890	106	1,647	137	0	0
Ohio Police & Firemen	1,839	0	1,681	158	0	0
Ohio School Employees	1,770	234	534	193	148	661
Aetna	1,730	1,107	104	18	104	397
New York City	1,675	0	622	1,053	0	0
Westinghouse Electric	1,633	908	651	51	0	23
Travelers	1,554	637	162	71	73	611
Virginia Supplemental	1,486	947	0	519	20	0
Exxon	1,425	1,025	376	9	0	15
NYNEX	1,412	686	726	0	0	0
U S WEST	1,400	1,400	0	0	0	0
San Francisco City/County	1,328	116	1,212	0	0	0
Kentucky Retirement Systems	1,300	430	39	831	0	0
Connecticut Trust Funds	1,275	0	838	394	0	43
Allied-Signal	1,259	459	600	200	0	0
Illinois State Board	1,200	200	1,000	0	0	0
CIGNA	1,194	694	369	42	89	0
Chase Manhattan	1,161	248	95	0	23	795
Shell Oil	1,115	313	690	112	0	0
Ford Motor	1,000	0	1,000	0	0	0
Hughes Aircraft	1,000	650	350	0	0	0
Equitable Life	940	218	638	6	78	0
Hawaii State Employees	922	14	125	142	278	363
New York Life	907	0	907	0	0	0
Nat'l Rural Electric Co-op	882	397	298	187	0	0
BellSouth	879	0	0	879	0	0
Pennsylvania Schools	858	0	858	0	0	0
Armco	766	0	575	191	0	0
Trans World Airlines	690	437	181	72	0	0
UMWA	650	0	500	150	0	0
Martin Marietta	633	186	174	273	0	0
Chrysler	558	558	0	0	0	0
Louisiana State Employees	542	0	324	218	0	0
Louisiana Teachers	520	0	0	520	0	0
Digital Equipment	500	na	na	na	na	na
BP America	468	314	125	29	0	0
Delta Air Lines	450	190	260	0	0	0
Chevron	414	0	0	414	0	0
Los Angeles City	316	0	0	316	0	0
Arkansas Teachers	314	0	0	314	0	0
Kentucky Teachers	262	0	216	5	41	0
American Airlines	250	50	100	100	0	0
K mart	237	0	237	0	0	0
Rhode Island	230	0	0	230	0	0
Caterpillar	225	225	0	0	0	0
Presbyterian Church	200	0	0	200	0	0
Detroit Systems	195	0	0	195	0	0
Navistar	176	0	122	54	0	0
Los Angeles Fire & Police	157	0	0	157	0	0
United Methodist Church	149	0	138	8	3	0
Illinois Municipal	145	0	0	145	0	0
Oklahoma Teachers	144	0	0	144	0	0
TRW	129	115	0	14	0	0
Teamsters, Central States	117	0	0	117	0	0
Arizona State Retirement	110	0	0	110	0	0
Boilermaker/Blacksmith	107	na	na	na	na	na
Los Angeles Water & Power	100	0	0	100	0	0
Mississippi Public Employees	100	0	0	100	0	0
Kansas Public Employees	92	0	47	45	0	0
Iowa Public Employees	88	0	0	88	0	0
Monsanto	70	0	70	0	0	0
Los Angeles County	69	0	69	0	0	0
Chicago Municipal	50	0	0	50	0	0
Texaco	50	0	50	0	0	0
S. California UFCW	46	0	0	36	4	6
Southern Baptist	39	0	0	0	18	21
United Parcel Service	35	11	0	0	11	13
Idaho Public Employees	25	0	0	25	0	0
Minnesota Mining and Mfg.	24	0	22	0	0	2
Bank of America	6	0	0	0	6	0
New Mexico Public Employees	6	0	4	2	0	0
Total	**490,768**	**173,506**	**224,374**	**39,605**	**17,139**	**22,937**

the same period, to $1.26 billion from $1.062 billion. Defined contribution assets increased 6%, to $529 million from $499 million.

Equity managers: Domestic — BEA; Manning & Napier; W.H. Reaves; Fayez Sarofim; State Street Research; Robert Torray; and Wellington.

Fixed-income managers: Domestic — BEA; Stamford Capital; and Wellington.

Real estate manager: Fayez Sarofim.

The master trustee is Bank of New York; the investment consultant is Buck.

Key personnel overseeing the investment management of the fund are G.P. Maloney, senior vice president-finance, and J.H. Shepard, manager-corporate benefit funds.

American Information Technologies Corp.

	($ millions)
Total assets	14,300
Defined benefit	12,100
Defined contribution	2,200
401(k)	2,200
Employer DB contributions	0
Benefit payments	400
Employer DC contributions	60
Internally managed assets:	
Total DB	3,550
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Short selling	
Defined benefit asset mix:	
Stocks	50%
Fixed income	40%
Cash equivalents	1%
Real estate equity	8%
Venture capital	1%
Defined contribution asset mix:	
Company stock	36%
Other stock	25%
GICs/BICs	39%

CHICAGO — As of Sept. 30, American Information Technologies Corp.'s total employee benefit assets increased 18.2% to $14.3 billion from $12.1 billion a year earlier. Defined benefit assets increased 16.3% during the same period, to $12.1 billion from $10.4 billion. Defined contribution assets increased 29.4%, to $2.2 billion from $1.7 billion.

Managers: — AmeriTrust; Bankers Trust; Baring International; Brinson Partners; Capital Guardian; Concord Capital; David J. Greene; Delaware Investment; First Wisconsin Asset; First Wisconsin Trust; Goldman, Sachs Asset; Harris Derivative; Henry Kaufman; IDS International; INVESCO; Jennison Associates; Lincoln Capital; Loomis, Sayles; Lord, Abbett; National Investment Services of America; Neuberger & Berman; RCM; Sit; and Travelers.

The master trustee and the global custodian is Harris Trust; the investment consultant is Callan.

Key personnel overseeing the investment management of the fund are Donald W. Phillips, chief investment officer; Harry A. Malone, director-benefit finance; and Lloyd B. Thompson, director-real estate.

American Stores Co.

	($ millions)
Total assets	1,882
Defined benefit	50
Defined contribution	1,832
Profit-sharing	1,832
Employer DB contributions	.144
Benefit payments	.60
Employer DC contributions	63
Hedging devices used:	
Stock options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	11%
Fixed income	86%
Cash equivalents	3%
Defined contribution asset mix:	
Other stock	45%
Fixed income	43%
Cash equivalents	5%
Real estate	7%

SALT LAKE CITY, Utah — As of Sept. 30, American Stores Co.'s total employee benefit assets increased 16% to $1.882 billion from $1.623 billion a year earlier. Defined benefit assets decreased 40.5% during the same period, to $50 miliion from $84 million. Defined contribution assets increased 19% to $1.832 billion from $1.539 billion.

Equity managers: Domestic — Institutional Capital; Lazard Freres; RCM; Templeton; and Wells Fargo.

International — Baring International; Nomura; Rowe Price-Fleming; and Templeton.

Fixed-income managers: Domestic — Neuberger & Berman; PIMCO; and Western Asset.

Real estate managers: Coldwell Banker; Hancock; LaSalle; and RREEF.

Other manager: Equitable.

The master trustee and global custodian is Bankers Trust; the investment consultant is Evaluation Associates.

Key personnel overseeing the investment management of the fund are Scott Bergeson, senior vice president; and Duane Whitney, controller.

American Telephone & Telegraph Co.

	($ millions)
Total assets	42,700
Defined benefit	33,376
Defined contribution	9,324
Thrift or savings plan	8,421
ESOP	903
Employer DB contributions	338
Benefit payments	1,148
Employer DC contributions	590
Internally managed assets:	
Total DB	2,024
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	58%
Fixed income	26%
Real estate equity	12%
Other	4%
Defined contribution asset mix:	
Company stock	43%
Other stock	19%
Fixed income	9%
GICs/BICs	29%

NEW YORK— As of Sept. 30, American Telephone & Telegraph Co.'s total employee benefit assets increased 21.5% to $42.7 billion from $35.143 billion a year earlier. Defined benefit assets increased 16.3% during the same period, to $33.376 billion from $28.691 billion. Defined contribution assets increased 44.5%, to $9.324 billion from $6.452 billion.

Managers: Abbott Capital; ABD; AEW; Bankers Trust; Batterymarch; Boston Co. Real Estate; Brown Brothers Harriman; Butler Capital; Capital Guardian; Chancellor Trust; Chase Investors; Chemical; Coldwell Banker; Copley; Corporate Property Investors; Denver Investment Advisors; Discount Corp.; Dusco; Eastdil; Equitable; Fidelity International; First Reserve; First Wachovia; Goldman, Sachs; G.T. Capital; John Hancock; Heitman; INVESCO; Investment Counselors of Maryland; Ivory & Sime; Jennison; JMB; Karsten; Lincoln Capital; Loomis, Sayles; Lord, Abbett; Mitchell Hutchins; Mellon Bank; J.P. Morgan; Morgan Grenfell; NCNB Texas; O'Connor Management; PIMCO; Posthorn Global; Prudential Asset; RREEF; RCM; Standish, Ayer & Wood; State Street Bank; State Street Research; United Capital; Wachovia Bank; Warburg, Pincus; Wellington; and Western Asset.

The trustees for the AT&T master pension trust are Bankers Trust, Chase Manhattan, Citibank, Mellon Bank, Northern Trust and State Street Bank. The global custodian is Chase Manhattan; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are David Feldman, corporate vice president; and Robert Angelica and Ronald Roessler, directors.

Amoco Corp.

	($ millions)
Total assets	4,581
Defined benefit	2,590
Defined contribution	1,991
Other	1,991
Employer DB contributions	0
Benefit payments	185
Employer DC contributions	60

Hedging devices used:
Bond options
Stock index futures
Fixed-income futures

Defined benefit asset mix:	
Stocks	68%
Fixed income	13%
Cash equivalents	9%
Real estate equity	5%
Other	5%

CHICAGO — As of Sept. 30, Amoco Corp.'s total employee benefit assets increased 14.1% to $4.581 billion from $4.014 billion a year earlier. Defined benefit assets increased 16.9% during the same period, to $2.59 billion from $2.214 billion. Defined contribution assets increased 10.6%, to $1.991 billion from $1.8 billion.

Equity managers: Domestic — Chase Investors; DFA; Fidelity Management; Forstmann-Leff; Franklin Portfolio; Fayez Sarofim; and State Street Research.

International — Acadian; Boston International; and State Street Bank.

Fixed-income managers: Fischer, Francis, Trees & Watts; PIMCO; and Security Capital.

Real estate managers: Corporate Property Investors and Equitable.

The master trustee and global custodian is Chase Manhattan.

Key personnel overseeing the investment management of the fund are Marvin L. Damsma, director-pension administration, and John S. Ruey, administrative manager-investments.

Anheuser-Busch Cos. Inc.

	($ millions)
Total assets	1,670
Defined benefit	995
Defined contribution	675
401(k)	616
Other	59
Employer DB contributions	8
Employer DC contributions	16

Defined benefit asset mix:	
Stocks	51%
Fixed income	38%
Cash equivalents	2%
Real estate equity	5%
GICs/BICs	1%
Private placement	3%
Defined contribution asset mix:	
Company stock	91%
Other stock	2%
Cash equivalents	4%
GICs/BICs	3%

ST. LOUIS — As of Sept. 30, Anheuser-Busch Cos. Inc.'s total employee benefit assets increased 56.8% to $1.67 billion from $1.065 billion a year earlier. Defined benefit assets increased 56.7% to $995 million from $635 million during the same period. Defined contribution assets totaled $675 million; a comparable figure for the previous year was not available.

Equity managers: Domestic — Dillon, Read; Mellon Capital; and Russell Trust.

Fixed-income managers: Domestic — Boatmen's; Equitable; General American; J.P. Morgan; and Russell Trust.

Real estate managers: Aetna; Equitable; JMB; and LaSalle.

The master trustee is Boatmen's Trust.

Key personnel overseeing the investment management of the fund are Jerry Ritter, vice president and group executive; Gerald Thayer, vice president and treasurer; and Pamela Moench, manager-pension investment.

Arizona State Retirement System

	($ millions)
Total assets	7,612
Defined benefit	7,612
Employer DB contributions	155
Benefit payments	212

Internally managed assets	110
Defined benefit asset mix:	
Stocks	40%
Fixed income	39%
Cash equivalents	18%
Mortgages	3%

PHOENIX, Ariz. — As of Sept. 30, the Arizona State Retirement System's total employee benefit assets increased 18.4% to $7.612 billion from $6.429 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Boston Co.; IDS; INVESCO; J.P. Morgan; and Wells Fargo.

International — State Street Bank and Warburg.

Fixed-income managers: Domestic — Boston Co.; Duff & Phelps; IDS; INVESCO; J.P. Morgan; and Wells Fargo.

Mortgage manager: Valley National Bank.

The master custodian is Mellon Bank; the global custodians are Mellon and State Street Bank; the investment consultant is Mercer Meidinger Hansen.

Key personnel overseeing the investment management of the fund are Edwin C. Gallison, director, and Douglas Lemon, assistant director.

Arkansas Teacher Retirement System

	($ millions)
Total assets*	2,166
Defined benefit	2,166
Employer DB contributions	88
Benefit payments	90

**as of Aug. 31, 1989*

Internally managed assets	314
Defined benefit asset mix:	
Stocks	33.6%
Fixed income	50.5%
Cash equivalents	15.9%

LITTLE ROCK, Ark. — As of Aug. 31, the Arkansas Teacher Retirement System's total employee benefit assets increased 18.6% to $2.166 billion from $1.827 billion as of July 30, 1988. All assets are defined benefit.

Equity manager: Domestic — Oppenheimer.

Fixed-income manager: Domestic — Commercial Management.

The master custodian is First Commercial Bank; the investment consultant is Shearson Lehman Hutton.

Key personnel overseeing the investment management of the fund are Mavolene C. Booth, investment manager, and Bill A. Shirron, executive director.

Armco Inc.

	($ millions)
Total assets	2,156
Defined benefit	1,917
Defined contribution	239
Other	239
Employer DB contributions	78
Benefit payments	177
Employer DC contributions	7

Internally managed assets:	
Total DB	766
Defined benefit asset mix:	
Stocks	52.3%
Fixed income	33.3%
Cash equivalents	13%
Real estate equity	0.2%
GICs/BICs	0.9%
Venture capital	0.3%
Defined contribution asset mix:	
Company stock	44%
Other stock	4%
GICs/BICs	52%

MIDDLETOWN, Ohio — As of Sept. 30, Armco Inc.'s total employee benefit assets increased 14.1% to $2.156 billion from $1.889 billion a year earlier. Defined benefit assets increased 15.7% during the same period, to $1.917 billion from $1.657 billion. Defined contribution assets increased 3%, to $239 million from $232 million.

Equity managers: Domestic — Alliance; Capital Guardian; Columbus Circle; Lincoln Capital; Mellon Capital; and Miller Anderson & Sherrerd.

International — Oechsle.

Real estate manager: RREEF.

GIC manager: John Hancock.

Private placements manager: Equitable.

Venture capital managers: Allsop; Brentwood; Concord Partners; DSV; and North American Private Equity.

The master trustee and global custodian is Chase Manhattan; the investment consultant is SEI.

The key person overseeing the investment management of the fund is Dennis Furey, general manager-investment management.

Atlantic Richfield Co.

	($ millions)
Total assets	3,541
Defined benefit	2,388
Defined contribution	1,153

Defined benefit asset mix:	
Stocks	74%
Fixed income	24%
Cash equivalents	2%
Defined contribution asset mix:	
Stock	68.3%
Fixed income	0.4%
Cash equivalents	31.3%

LOS ANGELES — As of Sept. 30, the Atlantic Richfield Co.'s total employee benefit assets increased 18.9% to $3.541 billion from $2.977 billion a year earlier. Defined benefit assets increased 13% during the same period, to $2.388 billion from $2.113 billion. Defined contribution assets increased 33.4% to $1.153 billion from $864 million.

The key person overseeing the investment management of the fund is E. Kent Damon Jr., president and chief investment officer of ARCO Investment Management Co.

B

Bakery & Confectionary Union & Industry International Pension Funds

	($ millions)
Total assets	2,175
Defined benefit	2,175
Employer DB contributions	150
Benefit payments	160

Defined benefit asset mix:	
Stocks	45.8%
Fixed income	37.3%
Cash equivalents	6.5%
Mortgages	8.1%
GICs/BICs	1.9%
Other	0.4%

KENSINGTON, Md. — As of Sept. 30, the Bakery & Confectionery Union & Industrial International Pension Funds' total employee benefit assets increased 17.6% to $2.175 billion from $1.849 billion a year earlier. All assets are defined benefit.

Balanced managers: Lazard Freres; Loomis, Sayles; M.D. Sass; Stein, Roe & Farnham; Trust Co. of the West; and Wertheim.

The master custodian is Mercantile Safe Deposit.

Key personnel overseeing the investment management of the fund are John Fleming, administrative director, and Richard Swift, director of investments.

Bank of America

	($ millions)
Total assets	1,633
Defined benefit	930
Defined contribution	703
401(k)	677
Other	26
Employer DB contributions	265
Benefit payments	119
Employer DC contributions	29

Internally managed assets:	
Total DB	6

Hedging devices used:
Bond options
Stock index futures
Fixed-income futures

Defined benefit asset mix:	
Stocks	55%
Fixed income	37%
Cash equivalents	5%
Real estate equity	1%
Annuities	1%
Other	1%
Defined contribution asset mix:	
Company stock	68%
Other stock	9%
Fixed income	4%
Cash equivalents	7%
GICs/BICs	12%

SAN FRANCISCO — As of Sept. 30, Bank of America's total employee benefit assets were $1.633 billion, with $930 million in defined benefit assets and $703 million in defined contribution assets.

Equity managers: Domestic — Alliance; Associated Capital; Mellon Capital; and Wellington Trust.

International — State Street Bank and WorldInvest.

Fixed-income managers: Domestic — Criterion; Standish, Ayer & Wood; and Western Asset.

International — WorldInvest.

Real estate managers: Coldwell Banker.

Other managers: KKR; Oak Investment; and Weiss, Peck & Greer.

The master trustee and global custodian is Bank of America; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Joel Damon, vice president, and Rich Krivcher, assistant vice president.

Bechtel Power Corp.

	($ millions)
Total assets	1,655
Defined contribution	1,655
Profit-sharing	507
401(k)	1,148

Internally managed assets	435

Hedging devices used:
Stock options
Stock index futures
Fixed-income futures

Defined contribution asset mix:	
Other stock	36%
Fixed-income	22%
Cash equivalents	11%
GICs/BICs	2%
Other	29%

SAN FRANCISCO — As of Sept. 30, Bechtel Power Corp.'s total employee benefit assets increased 16.8% to $1.655 billion from $1.417 billion a year earlier. All assets are defined contribution.

Equity managers: Domestic — Batterymarch; BEA Associates; Columbia; Dodge & Cox; Morgan Grenfell; Matrix Capital; Sierra Asset; Sit; Wellington; and Wells Fargo.

International — Boston International; J.P. Morgan; and Wells Fargo.

Fixed-income managers: Domestic — Columbia, PIMCO and Sierra Asset.

International — Morgan Guaranty and Wells Fargo.

Real estate managers: Aetna; Cabot, Cabot & Forbes; Corporate Property Advisors; Prudential; and RREEF.

Other manager: Bailard, Biehl & Kaiser.

The master trustee and global custodian is Bankers Trust; the investment consultant is Sierra Asset Management.

Key personnel overseeing the investment management of the fund are

Top 200 funds with defined contribution assets managed internally

($ millions)

Fund	Total	Equities	Bonds	Short-term	Real estate	Other
TIAA-CREF	81,000	36,000	38,000	3,000	3,000	1,000
Sears, Roebuck	5,019	1,226	724	859	0	2,210
Federal Retirement Thrift	4,257	0	0	4,257	0	0
Procter & Gamble	3,500	3,500	0	0	0	0
Shell Oil	3,118	0	3,118	0	0	0
General Electric	3,054	417	2,540	97	0	0
Exxon	2,422	0	0	2,422	0	0
Texas Municipal	2,200	0	2,200	0	0	0
General Dynamics	1,500	0	200	0	0	1,300
Evangelical Lutheran	1,407	448	959	0	0	0
Prudential Insurance	1,351	211	1,140	0	0	0
University of California	1,164	301	86	735	0	42
Hughes Aircraft	1,100	0	0	1,100	0	0
Aetna	973	354	0	0	0	619
Metropolitan Life	947	137	791	0	0	19
Halliburton	896	0	0	0	33	863
J.C. Penney	775	0	0	0	0	775
Tenneco	750	135	0	587	0	28
Equitable Life	699	130	546	0	3	20
CIGNA	581	NA	NA	NA	NA	NA
Chase Manhattan	523	220	73	230	0	0
Travelers	521	24	321	0	0	176
Bechtel Power	435	83	154	198	0	0
Eli Lilly	315	0	0	0	0	315
New Jersey	248	172	22	54	0	0
New York Life	224	40	136	7	0	41
USX	200	160	40	0	0	0
United Parcel Service	136	72	0	0	37	27
Minnesota State Board	69	0	69	0	0	0
American Airlines	50	0	0	50	0	0
Detroit Systems	31	0	0	31	0	0
Consolidated Natural Gas	20	0	0	20	0	0
Navistar	3	3	0	0	0	0
Total	**119,488**	**43,633**	**51,119**	**13,647**	**3,073**	**7,435**

investment managers David L. Redo and Vincent P. Kuhn Jr.

Bell Atlantic Corp.

	($ millions)
Total assets*	13,635
Defined benefit	11,550
Defined contribution	2,085
Thrift or savings	86
401(k)	1,824
ESOP	175

**P&I estimate*

PHILADELPHIA — As of Sept. 30, Bell Atlantic Corp.'s employee benefit assets totaled $13.635 billion, according to P&I calculations. The estimate is based on $11.541 billion in assets the company reported as of Dec. 31, 1988. That amounts to an estimated 26.1% increase from the $10.816 billion Bell Atlantic reported Aug. 31, 1988. Defined benefit assets were an estimated $11.55 billion and defined contribution assets $2.085 billion for the same period.

The master trustee of the pension trust is Mellon Bank; the global custodian is State Street Bank & Trust; the investment consultant is Frank Russell.

Other trustees/custodians are Bankers Trust and Midlantic National Bank.

Key personnel overseeing the investment management of the fund are Joseph A. Bobrowski, executive director-trust administration, and Edward P. Rennie, executive director-trust investments.

BellSouth Corp.

	($ millions)
Total assets	12,843
Defined benefit	10,543
Defined contribution	2,300
Other	2,300
Internally managed assets:	
Total DB	879

ATLANTA — As of Sept. 30, BellSouth Corp.'s total employee benefit assets increased 22.3% to $12.843 billion from $10.505 billion a year earlier. Defined benefit assets increased 20% during the same period, to $10.543 billion from $8.785 billion. Defined contribution assets increased 33.7%, to $2.3 billion from $1.72 billion.

Managers: Aetna; AEW; Alliance; AmSouth; Bankers Trust; Barnett Banks; Brown Brothers Harriman; C&S Investment; Connecticut General; DFA; First Kentucky Co.; First Tennessee Investment; First Union National; Greaves Capital; INVESCO; Investment Research; Jennison; Lehman Management; Massachusetts Mutual; Metropolitan Life; Mutual Benefit Life; NCNB; PIMCO; Pension Realty Advisors; Provident National Assurance; Prudential Asset; Richmond Capital; South Carolina National; Southeastern Asset; State Street Bank; Sun Banks; TREET; Travelers; Wachovia; and Wells Fargo.

The master trustee for the pension trust is Wachovia; for the savings plan, Bankers Trust.

Key person overseeing the investment management of the fund is Kincaid Patterson, director-trust assets.

Bethlehem Steel Corp.

	($ millions)
Total assets	3,155
Defined benefit	3,155
Employer DB contributions	700
Benefit payments	470
Internally managed assets	3,125
Defined benefit asset mix:	
Stocks	32%
Fixed income	60%
Cash equivalents	7%
GICs/BICs	1%

BETHLEHEM, Pa. — As of Sept. 30, Bethlehem Steel Corp.'s total employee benefit assets increased 15.9% to $3.155 billion from $2.722 billion a year earlier. All of the assets are defined benefit.

Equity managers: International — Putnam and J.P. Morgan.

The master trustee is Bankers Trust.

The key person overseeing the investment management of the fund is Gerard Mead, pension fund manager.

Boeing Co.

	($ millions)
Total assets*	11,001
Defined benefit	6,791
Defined contribution	4,210

**P&I estimate*

SEATTLE — As of Sept. 30, *Pensions & Investments* estimates Boeing Co. had $11.001 billion in employee benefit assets, of which $6.791 billion was defined benefit and $4.21 billion was defined contribution.

Key personnel overseeing the investment management of the fund are Gary Bland, vice president-trust investments and investor relations, and Terry Teague, manager-trust investments.

Special report on employee benefit trends: April 2.

Top 200 funds with assets in oil & gas

Defined benefit

Fund	($ millions)
AT&T	265
Minnesota State Board	96
Washington State Board	86
GTE	85
U S WEST	50
Textron	46
Honeywell	43
Southwestern Bell	42
Exxon	31
Ford Motor	30
ITT	16
S. New England Telephone	16
Chase Manhattan	15
USX	12
Aluminum Co. of America	4
Maine State Retirement	3
General Electric	2
Owens-Illinois	1
Xerox	1
Total	**844**

Defined contribution

Fund	($ millions)
Xerox	15
Evangelical Lutheran	3
Total	**18**

401(K)
Defined contribution plans, specifically 401(k) plans, have become indispensable means of attracting and retaining key employees.
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Board of Trustees, Boilermaker Blacksmith National Pension Trust

	($ millions)
Total assets*	2,132
Defined benefit*	2,132
Employer DB contributions*	57

From Money Market Directory

KANSAS CITY, Kan. — The Board of Trustees, Boilermaker Blacksmith National Penison Trust's total employee benefits were $2.132 billion as of June 1989, according to Money Market Directory.

David Hansen, financial director, oversees the investment management of the fund.

BP America Inc.

	($ millions)
Total assets	2,218
Defined benefit	1,385
Defined contribution	833
401(k)	833
Employer DB contributions	56
Benefit payments	100
Employer DC contributions	25
Internally managed assets:	
Total DB	468
Hedging devices used:	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	61.2%
Fixed income	25.1%
Cash equivalents	3%
Real estate equity	8.4%
Venture capital	2.3%
Defined contribution asset mix:	
Company stock	5.6%
Other stock	20.3%
Fixed income	0.3%
Cash equivalents	0.3%
GICs/BICs	73.5%

CLEVELAND — As of Sept. 30, BP America Inc.'s total employee benefit assets increased 17.8% to $2.218 billion from $1.883 billion a year earlier. Defined benefit assets increased 19.8% during the same period, to $1.385 billion from $1.156 billion. Defined contribution assets increased 14.6%, to $833 million from $727 million.

Equity managers: Domestic — Alliance; Mellon Capital; United Capital; and Value Line.

International — Baring International; Boston International; and Mellon Capital.

Fixed-income manager: Domestic — Mellon Capital.

Real estate managers: Aetna; Equitable; Sentinel; TCW.

Other manager: Mitchell Hutchins.

The master trustee and global custodian is Bankers Trust; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are R.F. Chase, executive vice president and chief financial officer; and H.W. Harpster, director-pension investments.

C

California Public Employees' Retirement System

	($ millions)
Total assets	54,000
Defined benefit	54,000
Employer DB contributions	1,479
Internally managed assets	45,600
Defined benefit asset mix:	
Stocks	46.9%
Fixed income	38.5%
Cash equivalents	3.7%
Real estate equity	6.2%
Mortgages	4.7%

SACRAMENTO, Calif. — As of Sept. 30, the California Public Employees' Retirement System's total employee benefit assets increased 17.5% to $54 billion from $45.94 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Atalanta/Sosnoff; Batterymarch; Brinson Partners; Chancellor; DFA; Lazard Freres; RCM; Roll & Ross; and TSA.

International — Baring International; Brinson Partners; County NatWest; Fidelity International; Fiduciary Trust; Morgan Grenfell; Nomura; Oechsle; Schroder Capital; State Street Bank; TCW; and Warburg Investment.

The master and global custodian is Boston Safe Deposit & Trust; the investment consultant is Wilshire Associates.

Key personnel overseeing the investment management of the fund are DeWitt Bowman, chief investment officer, and Basil J. Schwan and Walton R. Williams, principal investment officers.

California State Teachers' Retirement System

	($ millions)
Total assets	30,335
Defined benefit	30,335
Employer DB contributions	827
Benefit payments	1,355
Internally managed assets	15,908
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	43.4%
Fixed income	43.5%
Cash equivalents	7%
Real estate equity	3.9%
Mortgages	2%
Other	0.2%

SACRAMENTO, Calif. — As of Sept. 30, the California State Teachers' Retirement System's total employee benefit assets increased 22.7% to $30.335 billion from $24.721 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Barrow, Hanley, Mewhinney & Strauss; Denver Investment Advisors; Pilgrim, Baxter, & Greig; Provident Investment; TCW; Trinity; Wells Fargo; Wilmington Capital; and Wright Investors.

Real estate managers: Equitable; Lehndorff and Babson; and TCW.

The master custodian is State Street Bank; the investment consultant is Pension Consulting Alliance; the real estate consultant is Institutional Property Consultants; the alternative investments consultant is Abbott Capital Management.

Key personnel overseeing the investment management of the fund are Thomas E. Flanigan, chief investment officer; Sandra Parker, assistant chief executive officer; and James D. Mosman, chief executive officer.

Special report on global investing: April 30.

University of California

	($ millions)
Total assets	12,900
Defined benefit	11,736
Defined contribution	1,164
Other	1,164
Employer DB contributions	201
Benefit payments	15
Employer DC contributions	11
Internally managed assets:	
Total DB	11,736
Total DC	1,164
Defined benefit asset mix:	
Stocks	70.7%
Fixed income	28.3%
Cash equivalents	1%
Defined contribution asset mix:	
Other stock	25.9%
Fixed income	7.4%
Cash equivalents	63.1%
GICs/BICs	3.6%

BERKELEY, Calif. — As of Sept. 30, the University of California's total employee benefit assets increased 27.4% to $12.9 billion from $10.123 billion a year earlier. Defined benefit assets increased 28.2% during the same period, to $11.736 billion from $9.153 billion. Defined contribution assets increased 20%, to $1.164 billion from $970 million.

All the assets are managed internally.

The master trustee is Security Pacific.

Key personnel overseeing the investment management of the fund are Herbert Gordon, treasurer, and Patricia Small, associate treasurer.

Caterpillar Inc.

	($ millions)
Total assets	4,779
Defined benefit	4,154
Defined contribution	625
Thrift or savings	469
401(k)	156
Employer DB contributions	77
Benefit payments	233
Employer DC contributions	15
Internally managed assets:	
Total DB	225
Defined benefit asset mix:	

Top 200 funds with defined benefit assets in indexed equities and bonds

($ millions)

	Total	Indexed equities	Indexed bonds
New York City	32,110	10,681	21,429
California State Teachers	23,372	10,646	12,726
New York State & Local	15,968	15,968	0
New York State Teachers	13,748	13,748	0
AT&T	13,677	9,692	3,985
California Employees	13,000	13,000	0
NYNEX	5,666	4,344	1,322
General Electric	5,391	5,391	0
Florida State Board	5,254	5,254	0
Minnesota State Board	3,532	2,568	964
Ford Motor	3,500	3,300	200
Pennsylvania Schools	3,381	1,337	2,044
Maryland State Systems	3,332	3,038	294
Virginia Supplemental	3,172	3,172	0
Washington State Board	2,827	2,192	635
Pennsylvania Employes	2,731	2,165	566
Southwestern Bell	2,315	2,315	0
Exxon	2,170	1,695	475
Mississippi Public Employees	2,034	656	1,378
Arizona State Retirement	1,895	1,247	648
E.I. du Pont de Nemours	1,891	1,891	0
Rhode Island Retirement	1,794	1,104	690
Hospital/Healthcare	1,791	919	872
Illinois Teachers	1,702	1,308	394
Ameritech	1,590	870	720
Teamsters, Central States	1,508	1,056	452
Illinois State Universities	1,484	1,190	294
Operating Engineers	1,422	558	864
GTE	1,364	1,364	0
Westinghouse Electric	1,243	690	553
North Carolina	1,212	1,212	0
Colorado Employees	1,200	1,200	0
Tennessee Valley Authority	1,152	1,152	0
Sears, Roebuck	1,151	1,151	0
Connecticut Trust Funds	1,060	1,060	0
Commonwealth Edison	1,031	1,031	0
Los Angeles Fire & Police	990	990	0
Utah State Retirement	968	968	0
UMWA	950	450	500
Prudential Insurance	904	718	186
U S WEST	900	900	0
Philip Morris	884	884	0
Ohio School Employees	866	866	0
Indiana Public Employees	760	0	760
Tenneco	732	517	215
Shell Oil	720	495	225
World Bank	707	707	0
United Technologies	700	700	0
Nevada Public Employees	665	665	0
Unisys	611	611	0
Raytheon	609	609	0
Eastman Kodak	600	600	0
Illinois Municipal	595	595	0
Alabama Systems	572	572	0
Presbyterian Church	570	570	0
Chrysler	558	558	0
Idaho Public Employees	550	307	243
Iowa Public Employees	515	384	131
Honeywell	507	507	0
Nat'l Electrical Contractors	500	500	0
Texas Employees	499	499	0
Los Angeles City	490	490	0
New Mexico Public Employees	490	490	0
Pacific Gas & Electric	474	474	0
S. New England Telephone	431	385	46
Kentucky Retirement Systems	430	430	0
Maine State Retirement	407	407	0
San Francisco City/County	398	398	0
Ohio Police & Firemen	363	363	0
I.A.M. National Pension	352	89	263
Allied-Signal	326	326	0
Travelers	322	270	52
Anheuser-Busch	313	274	39
J.C. Penney	301	226	75
General Dynamics	300	200	100
United Methodist Church	296	274	22
Chevron	289	175	114
Bakery & Confectionery	285	160	125
Amoco	281	281	0
BP America	241	241	0
Kentucky Teachers	233	0	233
Aluminum Co. of America	226	226	0
Caterpillar	225	225	0
Cooper Industries	225	225	0
United Airlines	220	220	0
Bank of America	206	206	0
Mobil Oil	170	170	0
Philadelphia City	164	73	91
Eli Lilly	163	163	0
FPL Group	159	0	159
Southern California UFCW	159	159	0
State of Michigan	158	158	0
Nat'l Rural Electric Co-op	155	49	106
Hawaii State Employees	152	152	0
United Parcel Service	152	152	0
CIGNA	150	150	0
Armco	142	142	0
Delta Air Lines	140	140	0
Illinois State Board	140	140	0
Milwaukee City	130	130	0
New York Life	130	88	42
PPG Industries	115	115	0
Minnesota Mining & Mfg.	105	105	0
Phillips Petroleum	103	85	18
Louisiana State	100	0	100
American Electric Power	95	95	0
K mart	89	89	0
Alaska Retirement Systems	78	78	0
Procter & Gamble	71	37	34
Motorola	68	68	0
Southern California Edison	57	57	0
Aetna	49	49	0
Inland Steel	48	48	0
Detroit Systems	43	43	0
ITT	42	42	0
Hercules	38	38	0
Texaco	17	0	17
TRW	15	15	0
Owens-Illinois	11	0	11
Total	**210,634**	**155,222**	**55,412**

Stocks	50%
Fixed income	26%
Cash equivalents	2%
Real estate equity	4%
Tactical asset allocation	18%
Defined contribution asset mix:	
Company stock	85%
GICs/BICs	15%

PEORIA, Ill. — As of Sept. 30, Caterpillar Inc.'s total employee benefit assets increased 15.5% to $4.779 billion from $4.138 billion a year earlier. Defined benefit assets increased 15.1% during the same period, to $4.154 billion from $3.61 billion. Defined contribution assets increased 18.4%, to $625 million from $528 million.

Equity managers: Domestic — Delaware; Jennison; Oppenheimer; PRIMECAP; and Trinity.

International — Baring International; Fidelity International; Mellon; and Mercator.

Fixed-income managers: Domestic — Chase Investors and J.P. Morgan.

Real estate managers: Aetna; Brinson Partners; Equitable; and LaSalle.

Other manager: Mellon Capital.

The master trustee and global custodian is Northern Trust; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Fred Dickinson, manager-employee benefit funds; and Brian Christensen, benefit funds coordinator.

Chase Manhattan Corp.

	$ millions)
Total assets	1,684
Defined benefit	1,161
Defined contribution	523
401(k)	523
Internally managed assets:	
Total DB	1,161
Total DC	523
Defined benefit asset mix:	
Stocks	21.3%
Fixed income	8.2%
Real estate equity	2%
Annuities	67.2%
Other	1.3%
Defined contribution asset mix:	
Stock	42%
Fixed income	14%
Cash equivalents	44%

NEW YORK — As of Sept. 30, Chase Manhattan Corp. had employee benefit assets totaling $1.684 billion. Defined benefit assets totaled $1.161 billion and 401(k) plan assets totaled $523 million.

Key personnel overseeing the investment management of the fund are J. Richard Zecher, chairman, Chase Investors Management Corp., and Howard A. Scribner Jr., vice chairman.

Chevron Corp.

	($ millions)
Total assets*	7,069
Defined benefit	4,279
Defined contribution	2,790
Profit-sharing	2,159
Thrift or savings	471
ESOP	160
Employer DB contributions	0.4
Benefit payments	275

**P&I estimate*

Hedging devices used:	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	42%
Fixed income	23%
Cash equivalents	20%
Real estate equity	8%
GICs/BICs	7%
Defined contribution asset mix:	
Company stock	80%
Other stock	3%
Cash equivalents	3%
GICs/BICs	14%

SAN FRANCISCO — *Pensions & Investments* estimates that as of Sept. 30, Chevron Corp.'s total employee benefit assets were $7.069 billion, based on the $5.89 billion the company listed as of Dec. 31, 1988.

Equity managers: Domestic — Dodge & Cox; First Pacific; Franklin; Jennison; Merus; J.P. Morgan; RCM; and RIEM.

Fixed-income managers: Domestic — Discount Corp.; PIMCO; State Street; and STW.

Real estate managers: Equitable, Prudential and RREEF.

Other managers: Concord Partners; Hellman & Friedman; KKR; Mellon Capital; and Wells Fargo.

The master trustee is Bankers Trust; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are M.R. Klitten, vice president-finance; R.G. Williamson, assistant comptroller; and N.G. Darling, manager-investment analysis.

Municipal Employees' Annuity & Benefit Fund of Chicago

	($ millions)
Total assets*	1,845
Defined benefit	1,845
Employer DB contributions	93
Benefit payments	135

**as of June 30, 1989*

Internally managed assets	50
Defined benefit asset mix:	
Stocks	44%

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and
One Office Building
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Realty Advisors

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Grubb&Ellis
Institutional Investment Group
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Grubb&Ellis
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Grubb&Ellis
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IIG
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Fixed income	37%
Cash equivalents	10%
Real estate equity	4%
Venture capital	5%

CHICAGO — As of June 30, the Municipal Employees' Annuity & Benefit Fund of Chicago's total employee benefit assets increased 15.3% to $1.845 billion from $1.6 billion as of Sept. 30, 1988. All assets are defined benefit.

Equity managers: Domestic — Alliance; Ariel; Bankers Trust; Brinson Partners; Chicago Asset; Hawthorne; JCW; Oppenheimer; and Weiss, Peck & Greer.

International — Frank Russell.

Fixed-income managers: Domestic — Alliance; Bankers Trust; Brinson Partners; and JCW.

Real estate managers: Prudential and Trident Meyer.

Venture capital managers: Citicorp; First Analysis; Mesirow Financial; and Pacific Inland.

The master custodian is Continental Illinois; the investment consultant is Becker, Burke Associates.

The key personnel overseeing the investment management of the fund's assets are Thomas J. Stack, executive director; Michael Nehf, comptroller; and Laima Milaitis, deputy executive director.

Public School Teachers' Pension & Retirement Fund of Chicago

	($ millions)
Total assets*	3,502
Defined benefit	3,502

**P&I estimate*

CHICAGO — As of Sept. 30, *Pensions & Investments* estimates the Public School Teachers' Pension & Retirement Fund of Chicago's total employee benefit assets were $3.502 billion, all in a defined benefit plan. The estimate is based on data provided by Money Market Directory.

Chrysler Corp.

	($ millions)
Total assets	5,467
Defined benefit	4,498
Defined contribution	969
Thrift or savings	669
401(k)	300
Employer DB contributions	725
Benefit payments	565
Employer DC contributions	11
Internally managed assets:	
Total DB	558
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	54%
Fixed income	42%
Cash equivalents	1%
Real estate equity	3%
Defined contribution asset mix:	
Company stock	18%
Other stock	19%
Fixed income	2%
Cash equivalents	17%
GICs/BICs	44%

HIGHLAND PARK, Mich. — As of Sept. 30, Chrysler Corp.'s total employee benefit assets increased 23.9% to $5.467 billion from $4.414 billion a year earlier. Defined benefit assets increased 21.1% during the same period, to $4.498 billion from $3.713 billion. Defined contribution assets increased 38.2% to $969 million from $701 million as of Dec. 31, 1987.

Equity managers: — Ariel; Associated Capital; Atalanta/Sosnoff; Avatar; Bankers Trust; Bear Stearns; Sanford Bernstein; Chase Investors; Columbus Circle; DBL Preferred; Deutsche Bank Capital; Daiwa International; Carl Domino; Fidelity; GE; Glikenhaus; Hahn Holland & Grossman; Hancock Capital Growth; Harris Associates; Hotchkis and Wiley; InterMedia; Investment Research; Leavy; Manufacturers National-Detroit; McKenzie, Walker; Merrill Lynch; Mitchell Hutchins; NCM; Pacific Asset; Palley-Needelman; Perpetuity; Reimer & Koger; Rothschild International; Fayez Sarofim; SLH Capital; Smith Barney; TCW; and Veronis Suhler.

Fixed-income managers: Aetna; Bankers Trust; Drexel; Irving Trust; Metropolitan Realty; J.P. Morgan; Morgan Guaranty; Morgan Stanley; National Bank-Detroit; Travelers; TCW; and State Street Research.

Real estate managers: JMB; Prudential; RREEF; and Shearson Lehman Hutton.

The master trustee and global custodian is Bankers Trust.

Key personnel overseeing the investment management of the fund are F.W. Zuckerman, vice president and treasurer; J.L. Arpin, assistant treasurer; and R.P. Flynn, manager-pension fund investments.

CIGNA Corp.

	($ millions)
Total assets	1,775
Defined benefit	1,194
Defined contribution	581
Profit-sharing	85
Thrift or savings	388
Other	108
Employer DB contributions	30
Benefit payments	54
Internally managed assets:	
Total DB	1,194
Total DC	581
Defined benefit asset mix:	
Stocks	58%
Fixed income	31%
Cash equivalents	4%
Real estate equity	7%

PHILADELPHIA — As of Sept. 30, CIGNA Corp.'s total employee benefit assets increased 22.1% to $1.775 billion from $1.454 billion a year earlier. Defined benefit assets increased 16.5% during the same period, to $1.194 billion from $1.025 billion. Total defined contribution plan assets increased 35.4% to $581 million from $429 million.

Key personnel overseeing the investment management of the fund are James G. Stewart, executive vice president and chief financial officer, and George R. Trumbull, executive vice president and chief investment officer.

Citicorp

	($ millions)
Total assets	2,056
Defined benefit	1,356
Defined contribution	700
401(k)	700

NEW YORK — As of Sept. 30, Citicorp's total employee benefit assets were $2.056 billion. Defined benefit assets were $1.356 billion and defined contribution assets were $700 million.

Public Employees Retirement Association of Colorado

	($ millions)
Total assets	9,227
Defined benefit	9,227
Employer DB contributions	298
Benefit payments	317
Internally managed assets	8,075
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	46%
Fixed income	35%
Cash equivalents	5%
Real estate equity	8.6%
Mortgages	3.6%
GICs/BICs	1.6%
Other	0.2%

DENVER — As of Sept. 30, assets of the Public Employees Retirement Association of Colorado increased 21.6%, to $9.227 billion from $7.591 billion a year earlier. All assets are in defined benefit plans.

The custodian is Northern Trust.

Norman Benedict is chief investment officer.

Foreign exchange: Oct. 15.

Commonwealth Edison Co.

	($ millions)
Total assets	2,161
Defined benefit	2,161
Internally managed assets	2,030
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	54.7%
Bonds	41.4%
Cash equivalents	3.9%

CHICAGO — As of Sept. 30, Commonwealth Edison Co.'s total employee benefit assets increased 16.1% to $2.161 billion from $1.861 billion a year earlier. All assets are defined benefit.

Assets not managed internally are run by various commingled fund and mutual fund managers, which Commonwealth Edison officials declined to identify.

The master custodian is Northern Trust.

Key personnel overseeing the investment management of the fund are Howard R. Carlson, manager of investments; Rickard P. Schwartz, senior portfolio manager; and Michael J. Borrelli, investment research director.

The State of Connecticut Trust Funds

	($ millions)
Total assets	7,996
Defined benefit	7,996
Internally managed assets:	
Total DB	1,275
Defined benefit asset mix:	
Stocks	50.9%
Fixed income	27.1%
Cash equivalents	4.9%
Real estate equity	13.9%

Top 200 funds with indexed assets managed internally
($ millions)

Fund	Total	Defined benefit Indexed equities	Defined benefit Indexed bonds	Defined contribution* Indexed equities
TIAA-CREF	26,000	0	0	26,000
New York State & Local	15,968	15,968	0	0
New York State Teachers	13,748	13,748	0	0
California Public Employees	13,000	13,000	0	0
California State Teachers	12,726	0	12,726	0
General Electric	5,552	5,391	0	161
Florida State Board	3,290	3,290	0	0
Maryland State Systems	2,631	2,337	294	0
Sears, Roebuck	1,947	1,151	0	796
E.I. du Pont de Nemours	1,891	1,891	0	0
NYNEX	1,412	686	726	0
Exxon	1,322	946	376	0
Ameritech	1,210	870	340	0
Colorado Employees	1,200	1,200	0	0
Connecticut Trust Funds	1,060	1,060	0	0
Commonwealth Edison	1,031	1,031	0	0
Westinghouse Electric	966	413	553	0
Prudential Insurance	904	718	186	0
U S WEST	900	900	0	0
Utah State Retirement	748	748	0	0
Washington State Board	635	0	635	0
Alabama Systems	572	572	0	0
Chrysler	558	558	0	0
UMWA	500	0	500	0
Texas Employees	499	499	0	0
Kentucky Retirement Systems	430	430	0	0
GTE	322	322	0	0
Travelers	322	270	52	0
Virginia Supplemental	292	292	0	0
Caterpillar	225	225	0	0
State of Michigan	158	158	0	0
CIGNA	150	150	0	0
Delta Air Lines	140	140	0	0
Illinois State Board	140	140	0	0
Alaska Retirement Systems	78	78	0	0
Aetna	49	49	0	0
Metropolitan Life	19	0	0	19
Texaco	17	0	17	0
Total	**112,612**	**69,231**	**16,405**	**26,976**

*No defined contribution plan reported having indexed bonds managed internally.

Top 200 funds with defined contribution assets in indexed equities and bonds
($ millions)

Fund	Total	Equities	Bonds
TIAA-CREF	26,000	26,000	0
Sears, Roebuck	796	796	0
Philip Morris	540	540	0
Ford Motor	500	500	0
AT&T	399	399	0
NYNEX	385	233	152
United Methodist Church	320	296	24
GTE	299	264	35
Shell Oil	277	277	0
Martin Marietta	240	240	0
Trans World Airlines	232	232	0
Bechtel Power	163	163	0
General Electric	161	161	0
U S WEST	161	161	0
Unisys	157	157	0
Minnesota State Board	151	151	0
Honeywell	146	146	0
Motorola	133	133	0
Minnesota Mining & Mfg.	125	125	0
Exxon	118	118	0
Ameritech	110	110	0
Evangelical Lutheran	110	110	0
Cooper Industries	100	100	0
United Airlines	100	100	0
Westinghouse Electric	100	100	0
Southwestern Bell	97	97	0
United Parcel Service	95	95	0
ITT	92	92	0
Bank of America	88	58	30
American Stores	71	71	0
American Electric Power	65	65	0
GenCorp	64	64	0
Federal Retirement Thrift	62	48	14
General Dynamics	60	60	0
Deere	45	45	0
Pan Am	40	40	0
Southern California Edison	36	26	10
Metropolitan Life	19	19	0
TRW	19	19	0
Hercules	17	17	0
S. New England Telephone	15	15	0
Anheuser-Busch	10	10	0
USX	10	10	0
Detroit Systems	7	7	0
Procter & Gamble	5	3	2
UMWA	1	1	0
Total	**32,741**	**32,474**	**267**

Mortgages	2.9%
Other	0.3%

HARTFORD, Conn. — As of Sept. 30, the State of Connecticut Trust Funds' total employee benefit assets increased 28.2% to $7.996 billion from $6.236 billion a year earlier. All the assets are defined benefit.

Equity managers: Domestic — Aetna; Ariel; Bankers Trust; Capital Guardian; Concord Capital; Connecticut National; Franklin; One Lewis Street; Oppenheimer; Phoenix; Roanoke; and Wright.

International — Boston International; Capital Guardian; Fidelity; Nomura; and Schroder.

Fixed-income managers: Domestic — Bear Stearns; Loomis Sayles; PIMCO; Standish, Ayer; and STW.

International — Julius Baer; Brinson Partners; Smith Barney; and State Street Bank.

Real estate managers: Aetna; Aldrich, Eastman & Waltch; CIGNA; Copley; Hancock; Heitman; Hart Advisors; JMB; J.P. Morgan; LaSalle; Phoenix; Public Storage; RREEF; Sentinel; and TCW.

The master trustee and global custodian is Boston Safe Deposit; the investment consultant is TPF&C for domestic and Pension Consulting Alliance for international.

Key personnel overseeing the investment management of the fund are Frank McDermott, chief investment officer and assistant treasurer, and John C. Winchester, senior investment officer and investment manager contact.

Consolidated Edison Co. of New York

	($ millions)
Defined benefit	2,962
Employer DB contribution	90
Benefits payments	135

Hedging devices used:
Stock options

NEW YORK — As of Sept. 30, Consolidated Edison Co. of New York's defined benefit assets increased 16.2%, to $2.962 billion from $2.549 billion a year earlier.

Managers: Aetna; Batterymarch; Boston Co.; Chancellor; Equitable; First Manhattan; JMB; WR Lazard; Mellon; Metropolitan Life; J.P. Morgan; Prudential; Putnam; State Street Research; Travelers; Wells Fargo.

The master trustee is Bankers Trust.

The key person overseeing the investment management of the fund is John Bell, assistant treasurer.

Public funds: Oct. 29.

Consolidated Natural Gas

	($ millions)
Total assets	1,648
Defined benefit	970
Defined contribution	678
Thrift or savings	678
Employer DB contributions	0
Benefit payments	30
Employer DC contributions	22
Internally managed assets:	
Total DC	20
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	60%
Fixed income	3%
Cash equivalents	8%
IPGs	29%
Defined contribution asset mix:	
Company stock	79%
Other stock	2%
Cash equivalents	3%
IPGs	16%

PITTSBURGH — Consolidated Natural Gas Co. is new to the Top 200. Total employee benefit assets were $1.648 billion as of Sept. 30, of which $970 million was defined benefit and $678 million was defined contribution.

Equity managers: Domestic — BEA Associates; Lynch & Mayer; Quest Advisory; W.H. Reaves; RCM Capital; and Rosenberg Institutional.

Fixed-income managers: Domestic — Bankers Trust; Equitable; and Prudential.

The master trustee is Bankers Trust Co.; the investment management consultant is Lewis Bailey Associates.

D.W. Borneman, assistant vice president-asset management, oversees the investment management of the fund.

Cooper Industries Inc.

	($ millions)
Total assets	1,700
Defined benefit	950
Defined contribution	750
Employer DB contributions	11
Benefit payments	60
Employer DC contributions	30
Defined benefit asset mix:	
Stocks	20%
Cash equivalents	80%
Defined contribution asset mix:	
Other stock	20%
Cash equivalents	5%
GICs/BICs	75%

HOUSTON — As of Sept. 30, Cooper Industries Inc.'s total employee benefit assets increased 54.5% to $1.7 billion from $1.1 billion a year earlier. Defined benefit assets increased 31% to $950 million from $725 million. Defined contribution assets doubled to $750 million from $375 million.

Equity manager: Mellon.

Other managers: Fischer, Francis; J.P. Morgan; and T. Rowe Price.

The master trustee is Citibank.

The key person overseeing fund investments is Dwight S. Kadar, director-investment management.

D

Deere & Co.

	($ millions)
Total assets	2,720
Defined benefit	2,500
Defined contribution	220
Other	220
Employer DB contributions	47
Benefit payments	180
Employer DC contributions	10
Internally managed assets:	
Total DB	1,900
Defined benefit asset mix:	
Stocks	77%
Fixed income	19%
Cash equivalents	1%
Real estate equity	2%
Venture capital	1%
Defined contribution asset mix:	
Company stock	7%
Other stock	20%
GICs/BICs	73%

MOLINE, Ill. — As of Sept. 30, Deere & Co.'s total employee benefit assets increased 18.3% to $2.72 billion from $2.3 billion a year earlier. Defined benefit assets increased 16.3% during the same period, to $2.5 billion from $2.15 billion. Assets in its savings/401(k) plan increased 46.7%, to $220 million from $150 million.

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Equity managers: Domestic — Batterymarch; DFA; Morgan Guaranty; and Roll & Ross.

International — Acadian; DFA; and Roll & Ross.

Real estate managers: AEW; Copley; LaSalle; Morgan Guaranty.

The master trustee and global custodian is Boston Safe Deposit & Trust.

D.R. Schwartz is assistant treasurer-investments and oversees the investment management of the fund.

Delta Air Lines Inc.

	($ millions)
Total assets	4,050
Defined benefit	3,400
Defined contribution	650
Thrift or savings	650
Employer DB contributions	140
Employer DC contributions	30

Internally managed assets:	
Total DB	450
Hedging devices used:	
Stock options	
Stock index futures	
Defined benefit asset mix:	
Stocks	60%
Fixed income	25%
Cash equivalents	10%
Real estate equity	2.5%
Venture capital	2.5%
Defined contribution asset mix:	
Company stock	11%
Other stock	14%
Fixed income	13.5%
GICs/BICs	61.5%

ATLANTA — As of Sept. 30, Delta Air Lines Inc.'s total employee benefit assets increased 22.9% to $4.05 billion from $3.296 billion a year earlier. Defined benefit assets increased 23.8% during the same period, to $3.4 billion from $2.746 billion. Defined contribution assets increased 18.2%, to $650 million from $550 million.

Delta declined to disclose its managers.

The master trustee and global custodian is Harris Trust.

Jim Taylor is assistant vice president-investment management.

City of Detroit Retirement Systems

	($ millions)
Total assets*	3,587
Defined benefit	3,090
Defined contribution	497
Other	497
Employer DB contributions	144
Benefit payments	183
Employer DC contributions	0

**book value as of June 30, 1989*

Internally managed assets:	
Total DB	195
Total DC	31
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	24%
Fixed income	25%
Cash equivalents	13%
Real estate equity	3%
Mortgages	11%
GICs/BICs	9%
Private placements	1%
Other	14%
Defined contribution asset mix:	
Other stock	24%
Fixed income	25%
Cash equivalents	13%
GICs/BICs	9%
Real estate equity	3%
Mortgages	11%
Private placements	2%
Other	13%

DETROIT — As of June 30, the book value of the City of Detroit Retirement System's total employee benefit assets increased 9% to $3.587 billion from $3.291 billion a year earlier. Defined benefit assets increased 10.3% during the same period, to $3.09 billion from $2.802 billion. Defined contribution assets increased 1.6%, to $497 million from $489 million.

The retirement system is composed of the General Retirement System and the Police & Fire Retirement System.

Managers for the General Retirement System are: AFA; Ariel; Boston Co.; Citicorp Investment Management International; Comerica; Fiduciary Management; Hancock Financial; Hancock Properties; Loomis, Sayles; Manufacturers National; Marquette; MIG; NCM; Oppenheimer; PRIMA; Scudder, Stevens & Clark; and Transamerica Life.

Managers for the Police & Fire Retirement System are: Acorn; AFA; Ariel; Bankers Trust; Barnett; Citicorp Investment Management International; Hancock Financial; Hancock Properties; Income Research & Management; Loomis, Sayles; Marquette; Mortgage Investors; Munder; NCM; Oppenheimer; Putnam; and Travelers.

The master custodian for the general system is Comerica; the police and fire system uses Manufacturers Bank. The real estate investment consultant is Townsend.

Key personnel overseeing the investment management of the fund are Thomas Zdrodowski, executive secretary; Nicholas Degel, assistant administrative supervisor; and Walter Stampor, investment agent.

Digital Equipment Corp.

	($ millions)
Total assets	1,742
Defined benefit	1,477
Defined contribution	265
401(k)	265
Employer DB contributions	0
Benefit payments	7
Employer DC contributions	0

Internally managed assets:	
Total DB	500

ACTON, Mass. — As of Sept. 30, 1989, Digital Equipment Corp.'s total employee benefit assets increased 24.6% to $1.742 billion from $1.398 billion a year earlier. Defined benefit assets increased 21.2% during the same period, to $1.477 billion from $1.219 billion. Defined contribution assets increased 48%, to $265 million from $179 million.

Equity managers: Domestic — Alliance; Bankers Trust; Capital Guardian; First Quadrant; and Wells Fargo.

International — Boston International and Capital Guardian.

Fixed-income managers: Bankers Trust and Jennison.

Real estate manager: Aldrich, Eastman & Waltch.

The master trustee is Boston Safe Deposit.

The key person overseeing the investment management of the fund is A. Raymond Schmalz, group treasury manager.

The Dow Chemical Co.

	($ millions)
Total assets	2,700

MIDLAND, Mich. — As of Sept. 30, The Dow Chemical Co.'s employee benefit assets totaled $2.7 billion.

E.I. du Pont de Nemours & Co.

	($ millions)
Total assets	18,681
Defined benefit	12,945
Defined contribution	5,736
Thrift or savings	5,232
401(k)	157
ESOP	142
Other	205
Employer DB contributions	0
Benefit payments	644

Internally managed assets:	
Total DB	12,806
Hedging devices used:	
Bond options	
Stock index futures	
Fixed-income futures	
Short selling	
Defined benefit asset mix:	
Stocks	54%
Fixed income	35%
Cash equivalents	10%
Real estate equity	1%
Defined contribution asset mix:	
Company stock	9%
Other stock	6%
GICs/BICs	81%
Other	4%

WILMINGTON, Del. — As of Sept. 30, E.I. du Pont de Nemours & Co.'s total employee benefit assets increased 13.3% to $18.681 billion from $16.489 billion a year earlier. Defined benefit assets increased 11.9% during the same period, to $12.945 billion from $11.57 billion. Defined contribution assets increased 16.6% to $5.736 billion from $4.919 billion.

Real estate managers: Trammell Crow; EQK: Hancock; Lincoln Property; J.P. Morgan; and NCNB Texas.

Venture capital managers: APA Excelsior Funds I and II; Capital Management Services; Crossroads Capital; Golder, Thoma & Cressey; Hambrecht & Quist; Horsley Keogh; Pathfinder Funds; T. Rowe Price; Robertson Coleman & Stephens; and Warburg, Pincus.

The master custodian is Wilmington

Top 200 funds with assets in private placements

Defined benefit

Fund	($ millions)
Wisconsin State Board	2,806
General Electric	1,520
AT&T	1,353
Alabama Systems	1,013
State of Michigan	687
California State Teachers	478
Colorado Employees	340
New York State Teachers	305
North Carolina	267
Washington State Board	247
Kansas Public Employees	244
Honeywell	161
Prudential Insurance	161
Ford Motor	100
Missouri Public Schools	99
Pacific Gas & Electric	72
Los Angeles County	69
Union Carbide	54
New Jersey	50
United Airlines	50
San Francisco City/County	43
Textron	40
Travelers	38
Maine State Retirement	37
E.I. du Pont de Nemours	34
Detroit Systems	32
Anheuser-Busch	27
Illinois State Board	25
New York State & Local	25
Sears, Roebuck	21
Louisiana State Employees	20
Maryland State Systems	16
World Bank	14
S. New England Telephone	14
CIGNA	13
Ohio State Teachers	9
Westinghouse Electric	9
Phillips Petroleum	8
Armco	6
Equitable Life	5
Commonwealth Edison	3
Minnesota Mining & Mfg.	1
Indiana Public Employees	1
Kentucky Retirement	1
Xerox	1
Total	**10,519**

Defined contribution

Fund	($ millions)
TIAA-CREF	10,000
Xerox	23
Detroit Systems	12
Total	**10,035**

Top 200 funds with assets in LBOs

Fund	($ millions)
Washington State Board	1,063
TIAA-CREF*	700
New York State & Local	608
Oregon Public Employes	583
Wisconsin State Board	450
Iowa Public Employees	312
AT&T	226
State of Michigan	191
United Technologies	175
GTE	143
Minnesota State Board	118
Illinois State Board	75
Utah State Retirement	63
Colorado Employees	60
World Bank	56
Minnesota Mining & Mfg.	52
Delta Air Lines	50
Textron	50
ITT	34
Aluminum Co. of America	33
NYNEX	30
CIGNA	25
Phillips Petroleum	25
Pennsylvania Employes	21
Grumman	10
Bank of America	6
Eli Lilly	4
Total	**5,133**

*TIAA-CREF's figure reflects defined contribution assets. All others are defined benefit.

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Trust; the global custodian is Chase Manhattan.

Key personnel overseeing the investment management of the fund are K.E. Tucker, vice president-pension investments; E.J. Bassett, director-equity investments; and L.R. Starrett, director-fixed-income investments.

Pensions & Investments will publish a directory of leveraged buy-out funds and partnerships in the March 5 issue.

Top 200 funds with defined contribution assets in international investments

($ millions)

Fund	Total	Equities	Bonds
TIAA-CREF	4,053	4,000	53
Bechtel Power	333	222	111
Xerox	259	259	0
American Stores	157	157	0
Trans World Airlines	149	149	0
Sears, Roebuck	68	68	0
Halliburton	64	64	0
Motorola	61	61	0
Pan Am	56	56	0
BP America	47	47	0
Evangelical Lutheran	35	35	0
Southern Baptist	28	28	0
University of California	8	0	8
Eli Lilly	4	4	0
Detroit Systems	2	2	0
Total	**5,324**	**5,152**	**172**

E

Eastern Air Lines Inc.

	($ millions)
Total assets	2,410
Defined benefit	1,500
Defined contribution	910
Employer DB contributions	78
Benefit payments	128

MIAMI — As of Sept. 30, Eastern Air Lines Inc.'s total employee benefit assets increased 18.1% to $2.41 billion from $2.041 billion a year earlier. Defined benefit assets increased 25% during the same period, to $1.5 billion from $1.2 billion. Defined contribution assets increased 8.2%, to $910 million from $841 million.

Defined benefit managers: Delafield; Delaware; Equitable Real Estate; Forstmann-Leff; INVESCO; Northern Investment; Pacific Financial; Prudential Asset; Solomon; and Templeton.

Defined contribution managers: Brandywine; Campbell Advisors; Capital Guardian; Cramer Rosenthal McGlynn; Hawthorne Associates; Lord, Abbett; National Investment Services; Waite & Correnti; and Wellington.

Boston Safe Deposit is master trustee and global custodian for the defined benefit plan. State Street is master trustee and NCNB is real estate custodian for the defined contribution plan.

Key personnel overseeing the investment management of the defined benefit fund are Joseph L. Fromm, director-pension asset management, and Brian P. White, director-pension plans. Overseeing the investment management of the defined contribution fund is Charles G. Dyer, director.

Eastman Kodak Co.

	($ millions)
Total assets*	9,500
Defined benefit	7,300
Defined contribution	2,200
401(k)	2,200
Employer DB contributions	4
Benefit payments	270
Employer DC contributions	136

**P&I estimate*

Hedging devices used:
- Stock index futures
- Fixed-income futures

Defined benefit asset mix:	
Stocks	70%
Cash equivalents	1%
Real estate equity	10%
Annuities	14%
Other	5%
Defined contribution asset mix:	
Company stock	12%
Other stock	6%
GICs/BICs	82%

ROCHESTER, N.Y. — As of Sept. 30, Eastman Kodak Co.'s total employee benefit assets were estimated at $9.5 billion, based on the $7.931 billion listed by the company as of Dec. 31, 1988.

Equity managers: Domestic — American National Bank; Analytic; Baker Nye; Sanford C. Bernstein; Brignoli; Fidelity Management Trust; Neuberger & Berman; Oppenheimer; T. Rowe Price; PRIMECAP; Rosenberg Institutional; TCW; Value Line; and Waddell & Reed.

Global — Rogers, Casey and Templeton.

Real estate managers: Aetna; AEW; Boston Co.; Cabot, Cabot & Forbes; Copley; Equitable; Goldman, Sachs; JMB; Lehndorff & Babson; Metropolitan Life; National Property Advisors; The New England; Property Capital; PSI; Rogers, Casey; RREEF; and Schroder.

Tactical asset allocator: Boston Co.

Foreign exchange managers: Bankers Trust and FX Concepts.

Annuities manager: Metropolitan Life.

Capital growth manager: John Hancock.

LBO managers: Forstmann Little and Nightingale Atlantic.

Venture capital manager: Horsley Keogh.

Managed futures: Mount Lucas.

Oil & gas managers: Chase Investors and J.P. Morgan.

Cash manager: Discount Corp. of New York.

Other managers: EAI; Equitable Capital; First Reserve; Lazard Freres; Merrill Lynch; and Provident National.

Prudential is a GIC manager for the company's 401(k) plan.

Boston Safe Deposit is the master trustee and global custodian; the investment consultant is Rogers, Casey.

Key personnel overseeing the investment management of the fund are Russell L. Olson, director-pension investments, and A. Duff Lewis Jr., pension investment coordinator.

The Church Pension Fund (Episcopal)

	($ millions)
Total assets	1,837
Defined benefit	1,837
Employer DB contributions	44
Benefit payments	47

Hedging devices used:
- Stock options
- Bond options
- Stock index futures
- Fixed-income futures
- Short selling

Defined benefit asset mix:	
Stocks	59%
Fixed income	37%
Cash equivalents	4%

NEW YORK — As of Sept. 30, The Church Pension Fund's (Episcopal) total employee benefit assets increased 25% to $1.837 billion from $1.470 billion a year earlier. All the assets are defined benefit.

Equity managers: Domestic — Alliance and J.P. Morgan.

International — J.P. Morgan.

Fixed-income managers: Domestic — Alliance and J.P. Morgan.

International — J.P. Morgan.

The master trustee and global custodian is J.P. Morgan.

Key personnel overseeing the investment management of the fund are Robert A. Robinson, president, and Eric T. Lexow, senior vice president.

The Equitable Life Assurance Society of the United States

	($ millions)
Total asset	1,639
Defined benefit	940
Defined contribution	699
Thrift or savings	699
Employer DB contributions	3
Benefit payments	27
Employer DC contributions	25

Internally managed assets:	
Total DB	940
Total DC	699
Defined benefit asset mix:	
Stocks	23.2%
Fixed income	67.9%
Cash equivalents	0.6%
Real estate equity	8.3%
Defined contribution asset mix:	
Other stock	18.6%
Cash equivalents	0.1%
GICs/BICs	78.1%
Other	3.2%

NEW YORK — As of Sept. 30, The Equitable Life Assurance Society of the United States's total employee benefit assets were $1.639 billion, with $940 million in defined benefit assets and $699 million in a thrift or savings plan.

Key personnel overseeing the investment management of the fund are Peter A. Lipuma, vice president; Glenn H. Gettier Jr., executive vice president and chief financial officer; and Raymond L. Colotti, senior vice president.

Exxon Corp.

	($ millions)
Total assets	8,066
Defined benefit	3,814
Defined contribution	4,252
Thrift or savings	3,579
401(k)	507
ESOP	166
Employer DB contributions	103
Benefit payments	338

Top 200 funds with defined benefit assets in international investments

($ millions)

Fund	Total	Equities	Bonds	Other
United Nations Joint Staff	4,254	2,137	1,732	385
California Employees	2,700	2,700	0	0
AT&T	2,085	2,085	0	0
General Electric	1,913	1,653	260	0
GTE	1,845	1,459	386	0
Colorado Employees	1,152	1,152	0	0
U S WEST	1,150	1,150	0	0
Oregon Public Employes	1,115	1,115	0	0
Ameritech	1,030	930	100	0
United Technologies	960	860	100	0
Los Angeles County	923	903	16	4
E.I. du Pont de Nemours	911	380	470	61
NYNEX	853	853	0	0
Prudential Insurance	804	499	305	0
Arizona State Retirement	760	760	0	0
World Bank	713	436	277	0
Wisconsin State Board	705	380	325	0
Connecticut Trust Funds	680	680	0	0
Tennessee Consolidated	650	500	150	0
Illinois Teachers	626	493	133	0
Hawaii State Employees	609	483	126	0
Eastman Kodak	600	600	0	0
San Francisco City/County	566	256	310	0
Illinois Municipal	500	384	116	0
Philip Morris	500	500	0	0
Caterpillar	493	493	0	0
Exxon	417	417	0	0
Owens-Illinois	400	346	54	0
Kansas Public Employees	325	262	63	0
Southwestern Bell	318	318	0	0
TRW	314	210	104	0
Alaska Retirement Systems	310	310	0	0
Delta Air Lines	300	300	0	0
ITT	295	198	97	0
Pennsylvania Employes	290	60	230	0
Pacific Gas & Electric	272	272	0	0
Illinois State Universities	270	270	0	0
Monsanto	260	250	10	0
S. New England Telephone	251	251	0	0
Amoco	244	244	0	0
Pennsylvania Public School	244	0	183	61
Allied-Signal	227	227	0	0
Southern California Edison	223	223	0	0
American Airlines	200	140	60	0
Honeywell	193	105	88	0
Travelers	187	163	24	0
Hercules	181	181	0	0
Sears, Roebuck	180	180	0	0
University of California	178	0	178	0
North Carolina	176	176	0	0
USX	175	175	0	0
Unisys	172	172	0	0
Minnesota Mining & Mfg.	157	135	22	0
Los Angeles Fire & Police	155	155	0	0
Inland Steel	150	150	0	0
Philadelphia City	149	149	0	0
Utah State Retirement	145	145	0	0
FPL Group	143	143	0	0
Illinois State Board	135	125	10	0
Nat'l Rural Electric Co-op	126	126	0	0
Aetna	125	125	0	0
J.C. Penney	123	123	0	0
BP America	119	119	0	0
Nevada Public Employees	119	119	0	0
Bank of America	118	99	19	0
Shell Oil	115	115	0	0
Eli Lilly	113	113	0	0
Westinghouse Electric	107	107	0	0
Presbyterian Church	105	100	5	0
PPG Industries	102	102	0	0
Aluminum Co. of America	100	60	40	0
Chrysler	95	95	0	0
Deere	90	90	0	0
Chevron	86	0	30	56
Maine State Retirement	85	85	0	0
New York State & Local	83	83	0	0
CIGNA	81	81	0	0
United Airlines	80	80	0	0
Chicago Municipal	79	79	0	0
Armco	77	77	0	0
Rhode Island	69	69	0	0
Idaho Public Employees	62	62	0	0
Commonwealth Edison	59	34	25	0
Bakery & Confectionery	50	50	0	0
Iowa Public Employees	41	41	0	0
Southern Baptist	38	38	0	0
Bethlehem Steel	30	30	0	0
Mobil Oil	30	30	0	0
Motorola	30	30	0	0
New York Life	28	22	0	6
Xerox	16	16	0	0
Detroit Systems	15	15	0	0
General Dynamics	15	15	0	0
New Mexico Educational	12	12	0	0
American Stores	3	3	0	0
Total	**39,359**	**32,738**	**6,048**	**573**

Internally managed assets:	
Total DB	1,425
Total DC	2,422
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	63%
Fixed income	13%
Cash equivalents	6%
Real estate equity	9%
Other	9%
Defined contribution asset mix:	
Company stock	40%
Other stock	3%
Cash equivalents	57%

NEW YORK — As of Sept. 30, Exxon Corp.'s total U.S. employee benefit assets increased 6% to $8.066 billion from $7.609 billion a year earlier. Defined benefit assets increased 9% during the same period, to $3.814 billion from $3.498 billion. Defined contribution assets increased 3.4% to $4.252 billion from $4.111 billion.

Equity managers: Domestic — Sanford C. Bernstein; Fidelity; Trinity; and Wells Fargo.

International — State Street Bank and Wells Fargo.

Fixed-income managers: Domestic — Chase Investors; J.P. Morgan; and Wells Fargo.

Real estate managers: Aetna; Corporate Property Investors; Equitable; NCNB Texas; and Prudential.

Insured reserves managers: Equitable; John Hancock; Prudential; and Travelers.

Royalties managers: First City Texas and Premier Bancorp.

Venture capital manager: Horsley Keogh.

The master trustee is Bank of New York; the global custodian is State Street Bank.

Key personnel overseeing the investment management of the fund are W. Allen Harrison, assistant treasurer; James E. Bayne, manager-trusts and benefits finance; and Jonathan P. Mason, staff financial analyst.

F

Federal Retirement Thrift Investment Board

	($ millions)
Total assets	4,319
Defined contribution	4,319
Thrift or savings	4,319
Employer DC contributions	447
Internally managed assets	4,257
Defined contribution asset mix:	
Other stock	1.1%
Fixed income	0.3%
Cash equivalents	98.6%

WASHINGTON — As of Sept. 30, the Federal Retirement Thrift Investment Board's total employee benefit assets increased 90.2% to $4.319 billion from $2.271 billion a year earlier. All of the assets are in a defined contribution plan.

Equity manager: Domestic — Wells Fargo.

Fixed-income manager: Domestic — Wells Fargo.

The master custodians are the U.S. Treasury Department and Wells Fargo Bank.

Key personnel overseeing the investment management of the fund are Peter B. Mackey, director-investments; Alison L. Doone, deputy director-investments; and Monica L. Spaulding, financial analyst.

Florida State Board of Administration

	($ millions)
Total assets	18,700
Defined benefit	18,700
Employer DB contributions	860
Benefit payments	654
Internally managed assets	11,979
Hedging devices used:	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	44.7%
Fixed income	41.7%
Cash equivalents	9.6%
Real estate equity	4%

TALLAHASSEE, Fla. — As of Sept. 30, the Florida State Board of Administration's total employee benefit assets increased 29.8% to $18.7 billion from $14.411 billion 15 months earlier. All of the assets are in a defined benefit plan.

Equity managers: Domestic — Alliance; Ariel; Barnett Banks; Barrow, Hanley, Mewhinney & Strauss; Bear, Stearns; Delaware; Denver; Eagle; IDS Growth; Lazard Corporate Partners; Lazard Freres; Prudential Asset; Sun Banks; Westwood; and Wells Fargo.

Fixed-income managers: Domestic — Alliance and APAM.

Real estate managers: Aetna; Brinson Partners; Equitable; Goldman, Sachs; JMB; LaSalle; Lehndorff &

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Citibank is the master and global custodian; the investment consultant is SEI.

Key personnel overseeing the investment management of the fund are Cliff Hinkle, executive director; William O. Bell, chief of management policy; Lan Janecek, director of equities; Carmen Hiers, director of fixed income; and Doug Bennett, director of real estate.

Ford Motor Co.

	($ millions)
Total assets	22,800
Defined benefit	18,100
Defined contribution	4,700
Other	4,700
Employer DB contributions	400
Benefit payments	900
Employer DC contributions	110
Internally managed assets:	
Total DB	1,000
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	58%
Fixed income	28%
Cash equivalents	10%
Real estate equity	4%
Defined contribution asset mix:	
Company stock	55%
Other stock	11%
Cash equivalents	11%
GICs/BICs	21%
Other	2%

DEARBORN, Mich. — As of Sept. 30, Ford Motor Co.'s total employee benefit assets increased 16% to $22.8 billion from $19.65 billion a year earlier. Defined benefit assets increased 19.9% during the same period, to $18.1 billion from $15.1 billion. Defined contribution assets increased 3.3%, to $4.7 billion from $4.55 billion.

Equity managers: Global — Alliance Capital; Ariel; Sanford Bernstein; Brinson Partners; Capital Guardian; Chase; Concord Capital; Dewey Square; Dreman Value; Fidelity Management; Manufacturers National-Detroit; Mitchell Hutchins; J.P. Morgan; PRIMECAP; Sarofim Trust; Scudder Stevens; and State Street Research.

Fixed-income managers: Global - Capital Guardian; Dewey Square; J.P. Morgan; T. Rowe Price; Sarofim; State Street Research; and Wells Fargo.

Real estate managers: Aetna; CIGNA; Equitable; GE; JMB; LaSalle; Lehndorff & Babson; J.P. Morgan; NCNB; J.W. O'Connor; Public Storage; Sentinel; and TCW.

The master trustee and global custodian is Manufacturers National Bank of Detroit.

Key personnel overseeing the investment management of the fund are M.E. Maertens, manager-trust investments, and P.E. Sharp, assistant treasurer.

FPL Group Inc.

	($ millions)
Total assets	1,963
Defined benefit	1,369
Defined contribution	594
401(k)	463
ESOP	131
Employer DB contributions	0
Employer DC contributions	0
Hedging devices used:	
Bond options	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	53.2%
Fixed income	22.6%
Cash equivalents	17.6%
Real estate equity	6.6%
Defined contribution asset mix:	
Company stock	54%
Other stock	9%
GICs/BICs	37%

NORTH PALM BEACH, Fla. — As of Sept. 30, FPL Group Inc.'s total employee benefit assets increased 8.9% to $1.963 billion from $1.803 billion a year earlier. Defined benefit assets increased 11.2% during the same period, to $1.369 billion from $1.231 billion. Defined contribution assets increased 3.8%, to $594 million from $572 million.

Equity managers: Domestic — General American; J.P. Morgan; Roanoke; Fayez Sarofim; and Donald Smith.

International — J.P. Morgan and RCB Global Trust.

Fixed-income managers: Domestic — Wells Fargo and Western Asset.

Real estate managers: JMB; McMahan; and RREEF.

Tactical asset allocation manager: Wells Fargo.

The master trustee is First Wachovia; the investment consultant is Rogers, Casey & Associates.

Key personnel overseeing the investment management of the fund are Robert Sears, treasurer, and Robert McGrath, manager.

G

GenCorp Inc.

	($ millions)
Total assets	1,719
Defined benefit	1,408
Defined contribution	311
Thrift or savings	311
Defined benefit asset mix:	
Stocks	41.1%
Fixed income	50%
Cash equivalents	5.6%
Real estate equity	3.3%
Defined contribution asset mix:	
Company stock	6.9%
Other stock	9.7%
GICs/BICs	83.4%

FAIRLAWN, Ohio — As of Sept. 30, GenCorp Inc.'s total employee benefit assets increased 2.1% to $1.719 billion from $1.683 billion a year earlier. Defined benefit assets increased 1.4% during the same period, to $1.408 billion from $1.388 billion. Defined contribution assets increased 5.4% to $311 million from $295 million.

Equity managers: Domestic — J.P. Morgan; Neuberger & Berman; and Wilkens & Nanovic.

Fixed-income managers: Domestic — ASB and Lincoln Capital.

Real estate manager: First Management Group.

The master trustee is Northern Trust.

Key personnel overseeing the investment management of the fund are David K. McNiff, director-investment management, and Sina H. Baldwin, manager-investment analysis.

General Dynamics Corp.

	($ millions)
Total assets	6,000
Defined benefit	3,900
Defined contribution	2,100
Other	2,100
Employer DB contributions	120
Benefit payments	120
Internally managed assets:	
Total DB	2,700
Total DC	1,500
Defined benefit asset mix:	
Stocks	35%
Fixed income	62%
GICs/BICs	3%
Defined contribution asset mix:	
Company stock	9%
Other stock	13%
Fixed income	17%
GICs/BICs	61%

ST. LOUIS — As of Sept. 30, General Dynamics Corp.'s total employee benefit assets increased 20% to $6 billion from $5 billion a year earlier. Defined benefit assets increased 18.2% during the same period, to $3.9 billion from $3.3 billion. Total defined contribution assets, which include a 401 (k) plan and thrift or savings plan, increased 23.5% to $2.1 billion from $1.7 billion.

Equity managers: Domestic — Alliance; Ardsley; Daniel Breen; Campbell; Delaware Investment; GE Investment; Jennison; Lazard Freres; Miller, Anderson & Sherrerd; J.P. Morgan; Rosenberg Institutional; SASCO; Trinity; and Wells Fargo.

Fixed-income managers: Domestic — Bank IV; Boatmen's; Discount Advisers; and Lincoln Capital.

GIC managers: Aetna; Equitable; Hancock; and Travelers.

The master trustee and global custodian is Chase Manhattan Bank.

Key personnel overseeing the investment management of the fund are Charles D. Walbrandt, staff vice president; and Rebecca J. Roesch, manager-trust investment operation.

General Electric Co.

	($ millions)
Total assets	28,912
Defined benefit	24,318
Defined contribution*	4,594
Employer DB contributions	0
Benefit payments	1,000
Employer DC contributions	226

**as of June 30, 1989*

Internally managed assets:	
Total DB	22,818
Total DC	3,054
Defined benefit asset mix:	
Stocks	53%
Fixed income	24%
Cash equivalents	4%
Real estate equity	8%
Mortgages	2%
GICs/BICs	2%
Private placements	7%
Defined contribution asset mix:	
Company stock	35%
Other stock	8%
Fixed income	24%
Cash equivalents	2%
GICs/BICs	31%

STAMFORD, Conn. — As of Sept. 30, General Electric Co.'s total employee benefit assets increased 14.3% to $28.912 billion from $25.3 billion a year earlier. Defined benefit assets increased 15.3% during the same period, to $24.318 billion from $21.1 billion. Defined contribution assets increased 12% to $4.594 billion on June 30, 1989, from $4.1 billion on Sept. 30, 1988.

The custodian and global custodian is State Street Bank and Trust.

Key personnel overseeing the investment management of the fund are Dale Frey, chairman of the board and president of GE Investment Co.; Art Bahr, executive vice president; and John Meyers, executive vice president.

General Motors Corp.

	($ millions)
Total assets	40,900
Defined benefit	35,500
Defined contribution	5,400

NEW YORK — As of Sept. 30, General Motors Corp.'s total employee benefit assets increased 8.8% to $40.9 billion from $37.6 billion a year earlier. Defined benefit assets increased 9.2% during the same period, to $35.5 billion from $32.5 billion. Defined contribution assets rose 5.9% to $5.4 billion from $5.1 billion.

Managers: Aetna; AEW; ANB; AmeriTrust; Associated Capital; Bankers Trust; Baring America; Baring Institutional Realty; Baring International; Barrow, Hanley Mewhinney & Strauss; Batterymarch; BEA; Beekman Capital; Sanford Bernstein; Boston Co.; Canada Life; Capital Guardian; Chancellor; Chase Manhattan; Citibank; County NatWest; Cypress Capital; Delaware Investment Advisors; Dewey Square; DFA; Fidelity International; Fidelity Management; FNB Boston; FNB Chicago; Franklin Portfolio; Frontier Capital; G.T. Capital; Harris Trust; Hill Samuel; W.R. Huff; INVESCO; Jennison; Kleinwort Benson; Lazard Freres; Lehman Management; Lincoln Capital; MacKay-Shields; Magten; Marathon; Matrix Capital; Mellon Bank; Merrill Lynch; Metropolitan Life; Morgan Grenfell; Morgan Guaranty; Morgan Stanley Asset; National Bank of Detroit; Nomura Capital; Oechsle; Provident Investment Counsel; Prudential; R.P.I. Institutional; Rosenberg Institutional; Rowe Price-Fleming; N.M. Rothschild International; Schroder Capital; TAL Investment; TCW Asset; United Capital; Value Line; Weiss Peck & Greer; Wells Fargo; and WorldInvest.

The master trustees are Bankers Trust, Mellon Bank and Chase; the global custodian is Chase.

Key personnel overseeing the investment management of the fund are W. Gordon Binns Jr., vice president and chief investment funds officer, and R. Charles Tschampion, director-portfolio.

Special report on mutual funds: June 11.

Top 200 funds with assets in GICs/BICs
($ millions)

	Total	Defined benefit	Defined contribution
Shell Oil	2,969	64	2,905
AT&T	2,464	0	2,464
General Electric	2,252	475	1,777
Eastman Kodak	1,800	0	1,800
Westinghouse Electric	1,600	0	1,600
General Dynamics	1,400	100	1,300
Unisys	1,394	170	1,224
Southern Baptist	1,184	83	1,101
Philip Morris	1,020	0	1,020
Ford Motor	1,000	0	1,000
Procter & Gamble	1,000	0	1,000
Halliburton	863	0	863
GTE	804	0	804
J.C. Penney	775	0	775
Mobil Oil	694	0	694
Xerox	692	0	692
Ameritech	680	0	680
Martin Marietta	657	0	657
NYNEX	643	0	643
BP America	613	0	613
Chevron	609	307	302
Grumman	600	0	600
Honeywell	585	0	585
Phillips Petroleum	550	0	550
Equitable Life	546	0	546
Monsanto	536	0	536
Union Carbide	508	0	508
Raytheon	456	0	456
ITT	454	0	454
K mart	447	103	344
Travelers	424	424	0
Minnesota Mining & Mfg.	423	0	423
PPG Industries	401	16	385
Delta Air Lines	400	0	400
United Airlines	400	0	400
Inland Steel	391	61	330
Southwestern Bell	390	0	390
Consolidated Natural Gas	389	281	108
Eli Lilly	378	63	315
Trans World Airlines	373	91	282
Aluminum Co. of America	355	0	355
Cooper Industries	350	0	350
United Methodist Church	338	138	200
Chrysler	337	10	327
TRW	332	0	332
United Parcel Service	327	83	244
U S WEST	314	0	314
American Electric Power	310	0	310
Hercules	280	35	245
Detroit Systems	278	278	0
Nat'l Rural Electric Co-op	278	0	278
S. California UFCW	269	269	0
GenCorp	200	0	200
Allied-Signal	184	184	0
Tennessee Valley Authority	182	43	139
S. New England Telephone	175	0	175
FPL Group	170	0	170
Deere	160	0	160
Colorado Employees	153	153	0
Armco	141	18	123
Presbyterian Church	130	130	0
Southern California Edison	130	80	50
USX	115	0	115
Pan Am	85	0	85
Bank of America	79	0	79
Minnesota State Board	50	0	50
Textron	50	50	0
Operating Engineers	49	49	0
Hawaii State Employees	45	45	0
Bakery & Confectionery	41	41	0
New York Life	34	0	34
Anheuser-Busch	31	10	21
Pacific Gas & Electric	26	0	26
Bethlehem Steel	25	25	0
Navistar	22	5	17
Bechtel Power	21	0	21
Owens-Illinois	21	21	0
Connecticut Trust Funds	19	19	0
Evangelical Lutheran	4	0	4
Illinois State Universities	3	3	0
UMWA	2	0	2
Total	**39,879**	**3,927**	**35,952**

Employees' Retirement System of Georgia

	($ millions)
Total assets*	3,458
Defined benefit	3,458
Employer DB contributions	244

**From Money Market Directory*

ATLANTA — According to Money Market Directory, the Employees' Retirement System of Georgia's total employee benefit assets were $3.458 billion as of June 30.

All of the assets are in a defined benefit plan.

Key personnel overseeing the investment management of the fund are: Rudolph Johnson, director, and Gwin Brewton, division director of retirement counselors and benefits.

Georgia Teachers Retirement System

	($ millions)
Total assets*	8,908
Defined benefit	8,908
Employer DB contributions	661

**From Money Market Directory*

ATLANTA — As of June 30, the Georgia Teachers Retirement System's total employee benefit assets were $8.908. All assets are defined benefit.

Key personnel overseeing the investment management of the fund are C.W. Cary, director, and Nancie H. Boedy, assistant director.

Grumman Corp.

	($ millions)
Total assets	3,170
Defined benefit	2,150
Defined contribution	1,020
Thrift or savings	1,020
Benefit payments	80
Employer DC contributions	17
Internally managed assets:	
Total DB	2,010
Defined benefit asset mix:	
Stocks	40%
Fixed income	33%
Cash equivalents	21%
Real estate equity	5%
Other	1%
Defined contribution asset mix:	
Company stock	25%
Other stock	10%
Fixed income	6%
GICs/BICs	59%

BETHPAGE, N.Y. — As of Sept. 30, Grumman Corp.'s total employee benefit assets increased 12.8% to $3.17 billion from $2.81 billion a year earlier. Defined benefit assets increased 13.1% during the same period, to $2.15 billion from $1.9 billion. Assets in its defined contribution plan, a thrift plan, increased 12.1% to $1.02 billion from $910 million.

Equity managers: Domestic — First Manhattan.

Fixed-income managers: Domestic — First Manhattan.

Real estate managers: CIGNA; Equitable; Prudential; and Sentinel.

The master trustee is Bank of New York.

The key person overseeing the investment management of the fund is William R. Parmentier, assistant treasurer and investment manager.

GTE Corp.

	($ millions)
Total assets	12,423
Defined benefit	10,669
Defined contribution	1,754
401(k)	1,174
ESOP	580
Employer DB contributions	0
Benefit payments	464
Employer DC contributions	69
Internally managed assets:	
Total DB	2,528
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Defined benefit asset mix:	
Stocks	69%
Fixed income	22%
Cash equivalents	3%
Real estate equity	1%
Other	5%
Defined contribution asset mix:	
Company stock	48.3%
Other stock	12.4%
Fixed income	1.6%
GICs/BICs	37.7%

STAMFORD, Conn. — As of Sept. 30, GTE Corp's. total employee benefit assets increased 17.2% to $12.423 billion from $10.596 billion a year earlier. Defined benefit assets increased 18.3% during the same period, to $10.669 billion from $9.016 billion. Defined contribution assets increased 11% to $1.754 billion from $1.58 billion.

Equity managers: Domestic — Baker, Nye; Bankers Trust; Sanford C. Bernstein; BMI; Cashman, Farrell; Concord; Darien Capital; Eagle Management; First Manhattan; First Pacific; Franklin; Frontier; General American; Geocapital; Hotchkis and Wiley; Oppenheimer; Pacific Financial; Provident; Richter; Rosenberg Institutional; Donald Smith; Weiss, Peck and Greer.

International — Bankers Trust; Baring; Grantham, Mayo; Mercator; Morgan Guaranty; Nikko; Philippe; Rowe Price-Fleming; TCW/Cursitor-Eaton.

Fixed-income managers: Domestic — Baring America; Pacific Investment; Rampart; Security Capital; Solomon.

International — Beutel, Goodman and WorldInvest.

Real estate managers: Citibank; Manufacturers National Bank; State Street Bank; TCW.

Non-traditional managers: Chancellor (venture capital); Chase Investors; Energy Investors; Forest Investment; Hancock Group/Forest; Manufacturers National Bank; TCW.

The master trustee and global custodian is Bankers Trust Co.

The key personnel overseeing the investment management of the pension funds' assets are John B. Carroll, president of GTE Investment Management Corp., a subsidiary of GTE Corp.; and Pamela W. McCann, vice president-pension fund management and fixed income.

Halliburton Co.

	($ millions)
Total assets	2,270
Defined contribution	2,270
Profit-sharing	1,223
Other	1,047
Employer DC contributions	30
Internally managed assets	896
Hedging devices used:	

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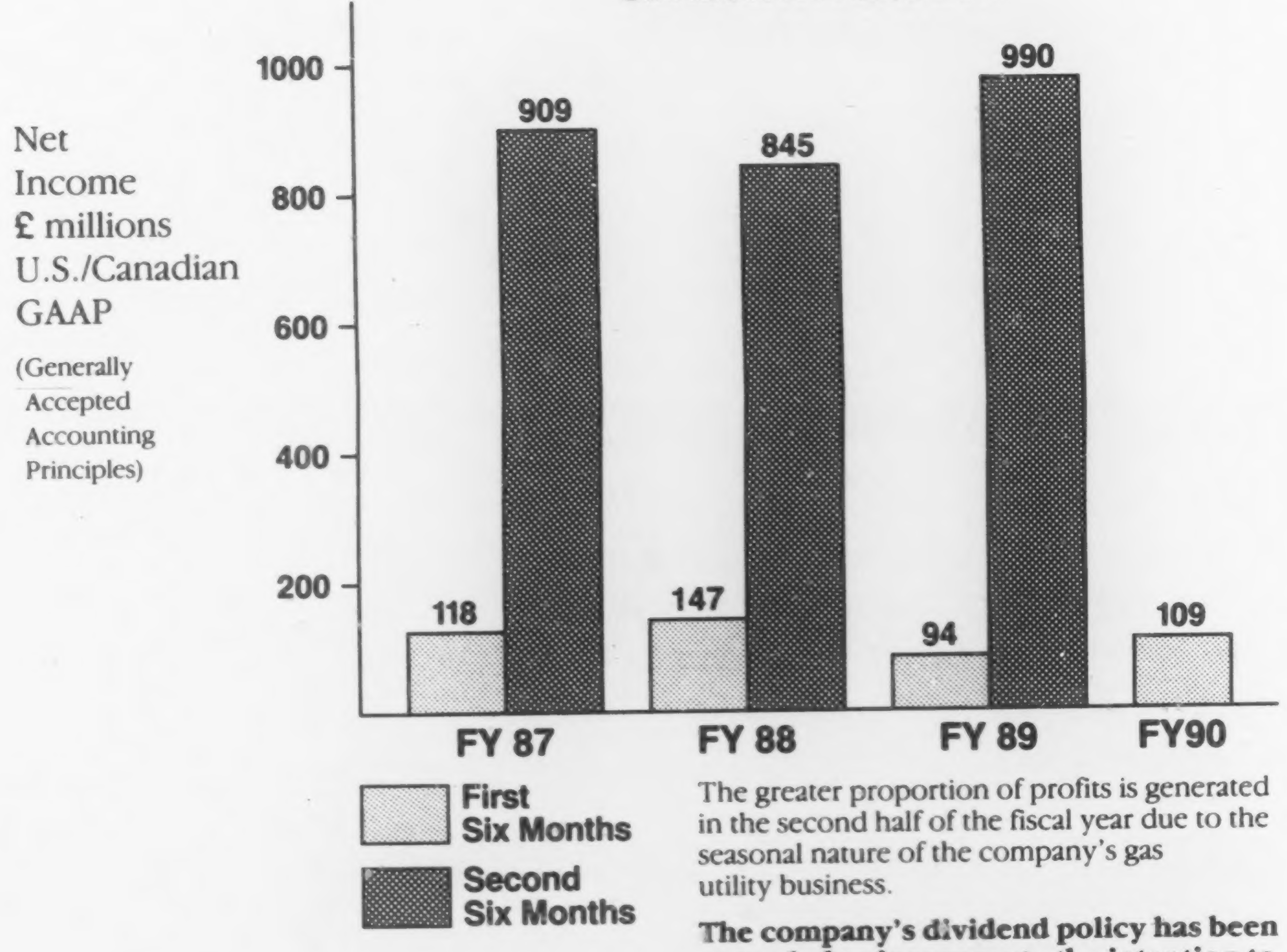

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	First six months fiscal year 1990 £	First six months fiscal year 1989 £	Fiscal year ended 31 March 1989 £	Fiscal year ended 31 March 1988 £
Sales	2,754	2,638	7,526	7,364
Net Profit* (millions)	109**	94	1,084**	992
Earnings per ADS (pence)*	26	22	256	239
Dividend per Ordinary Share (pence)	3.2	2.75	9.0	8.0

*U.S. and Canadian GAAP-adjusted
**The group has adopted the provisions of FAS 87—Employers' Accounting for Pensions—in its results for Fiscal '89 and the first six months of Fiscal '90. Results for other periods have not been restated.
10 Ordinary shares are equivalent to one American Depositary Share (ADS).
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Fixed-income futures	
Defined contribution asset mix:	
Company stock	5%
Other stock	48%
Fixed income	8%
Cash equivalents	1%
GICs/BICs	38%

DALLAS — As of Sept. 30, Halliburton Co.'s total employee benefit assets increased 15.5% to $2.27 billion from $1.965 billion a year earlier. All assets are defined contribution.

Equity managers: Domestic — INVESCO; Lehman Management; Fayez Sarofim; and Wentworth, Hauser & Violich.

International — Marsh & Cunningham-Castegren; SBC; and Schroder.

Fixed-income managers: Domestic — Neuberger & Berman; PIMCO; and Putnam Advisory.

The master trustee and global custodian is State Street Bank; the investment consultant is SEI.

Nathaniel Duffield is director-trust investments.

Employees' Retirement System of the State of Hawaii

	($ millions)
Total assets	4,051
Defined benefit	4,051
Employer DB contributions	30
Benefit payments	203
Internally managed assets	922
Hedging devices used:	
Stock options	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	40%
Fixed income	32%
Cash equivalents	9%
Real estate equity	8%
Mortgages	10%
GICs/BICs	1%

HONOLULU — As of Sept. 30, the Employees' Retirement System of the State of Hawaii's total employee benefit assets increased 15.9% to $4.051 billion from $3.495 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; Barrow, Hanley, Mewhinney & Strauss, Cadinha; Delaware Investment; Denney & Denney; Hanson; INVESCO; McCowan; and Denis Wong.

International — Daiwa; Nomura; and Schroder.

Fixed-income managers: Domestic — Lehman Management; PIMCO; Scudder, Stevens & Clark; Security Pacific Investment; and Wentworth, Hauser & Violich.

International — ABD; Capital Management International; INVESCO/MIM; Prudential; and Putnam International.

Real estate managers: Aetna; Connecticut General; Hancock; and Metropolitan Life.

The master and global custodian is Bank of New York; the investment consultants are SEI and Callan.

Key personnel overseeing the investment management of the fund are Stanley Siu, executive secretary, and David Shimapukuro, assistant secretary.

Hercules Inc.

	($ millions)
Total assets	1,752
Defined benefit	1,412
Defined contribution	340
401(k)	340
Employer DB contributions	6
Benefit payments	67
Employer DC contributions	30
Defined benefit asset mix:	
Stock	58%
Fixed income	30%
Cash equivalents	1%
Real estate equity	9%
GICs/BICs	2%
Defined contribution asset mix:	
Company stock	19%
Other stock	5%
Cash equivalents	4%
GICs/BICs	72%

WILMINGTON, Del. — As of Sept. 30, Hercules Inc.'s total employee benefit assets increased 10.3% to $1.752 billion from $1.589 billion a year earlier. Defined benefit assets increased 10.4% during the same period, to $1.412 billion from $1.279 billion. Defined contribution assets increased 9.7%, to $340 million from $310 million.

Equity managers: Domestic — Capital Guardian; Cooke & Bieler; Geewax, Terker; Lazard Freres; and Mellon Capital.

International — Fidelity; Marvin & Palmer; J.P. Morgan; and Warburg.

Fixed-income managers: Domestic — Robert C. Brown; Mellon Capital; J.P. Morgan; and The New England.

Real estate managers: Aetna, Equitable; and Prudential.

Other managers: Aetna and Travelers.

The master trustee is Bankers Trust; the global custodian is Chase Manhattan; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are John R. Long, director-investments; David K. Hall, senior financial analyst;

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Hewlett-Packard Co.

	($ millions)
Total assets*	1,699
Defined benefit	274
Defined contribution	1,425

**P&I estimate*

PALO ALTO, Calif. — *Pensions & Investments* estimates that as of Sept. 30, Hewlett-Packard Co.'s total employee benefit assets were $1.699 billion, of which $274 million was defined benefit and $1.425 billion was defined contribution. The estimates are based on Money Market Directory data.

Robert E. Greeley, manager-corporate investments, oversees the investment management of the funds.

Honeywell Inc.

	($ millions)
Total assets	2,909
Defined benefit	2,096
Defined contribution	813
401(k)	813
Employer DB contributions	17
Benefit payments	119
Defined benefit asset mix:	
Stocks	41.8%
Fixed income	25.9%
Cash equivalents	10.4%
Real estate equity	8.2%
Private placements	7.7%
Venture capital	3.9%
Oil & gas	2.1%
Defined contribution asset mix:	
Other stock	18%
GICs/BICs	72%
Other	10%

Top 200 funds with assets in mortgages

Defined benefit

Fund	($ millions)
New York State & Local	2,589
California Employees	2,500
Alabama Systems	1,728
New York State Teachers	1,711
Ohio State Teachers	1,146
State of Michigan	1,094
Pennsylvania Employes	636
California State Teachers	592
Oregon Public Employes	510
General Electric	422
San Francisco City/County	379
Hawaii State Employees	363
Detroit Systems	339
Colorado Employees	336
Arizona State Retirement	250
Washington State Board	221
Operating Engineers	197
Alaska Retirement Systems	193
Pennsylvania Schools	178
Bakery & Confectionery	177
Westinghouse Electric	151
Los Angeles County	113
Idaho Public Employees	110
Wisconsin State Board	103
Kentucky Teachers	102
Nevada Public Employees	74
Union Carbide	71
Virginia Supplemental	68
Illinois State Board	55
Ohio School Employees	44
USX	40
Iowa Public Employees	35
Utah State Retirement	30
Aetna	21
Southern Baptist	21
Maryland State Systems	20
Ohio Police & Firemen	12
Phillips Petroleum	10
Philadelphia City	7
Missouri Public Schools	5
New Mexico Employees	4
S. California UFCW	3
United Methodist Church	1
Total	**16,661**

Defined contribution

Fund	($ millions)
TIAA-CREF	18,000
Detroit Systems	55
Nat'l Electrical Contractors	13
San Francisco City/County	1
United Methodist Church	1
Total	**18,070**

MINNEAPOLIS — As of Sept. 30, Honeywell Inc.'s total employee benefit assets increased 14.6% to $2.909 billion from $2.539 billion a year earlier. Defined benefit assets increased 12.7% during the same period, to $2.096 billion from $1.86 billion. Defined contribution assets increased 19.7%, to $813 million from $679 million.

Equity managers: Domestic — Alliance; Forstmann-Leff; GAMCO; Jundt/Capen; and Mellon Capital.

International — Baring International and IDS International.

Fixed-income managers: Domestic — Fischer, Francis, Trees & Watts.

International — Brinson Partners.

Real estate managers: Aetna; Baring Institutional Realty; Coldwell; McMahan; State Street Bank; and TCW.

Venture capital managers: Associated Venture Investors; Centennial Fund; Concord Partners; DLJ Growth Associates; Dougery, Jones & Wilder; Brinson Partners; Forstmann Little; Investech; Medical Inovications; Morgan, Holland; Narragansett First Fund; New Court Partners; Norton Associates; Recovery Management Investors; Robertson Coleman, Stephens & Woodman; T.A. Associates; T. Rowe Associates; Ventech Partners; and Welsh, Carson, Anderson & Stowe.

Private placement managers: Bridge Capital and John Hancock.

Oil and gas managers: Chase Investors; First Reserve; and TCW.

GIC manager: Travelers.

The master trustee for the defined benefit plan is Boston Safe Deposit; the global custodian for equities is Chase Manhattan; the investment consultant is Rogers, Casey.

Key personnel overseeing the investment management of the fund are D.W. Veverka, director-pension investments, and J.T. Wangard, manager-pension investments.

National Benefit Fund for Hospital & Health Care Employees

	($ millions)
Total assets	2,241
Defined benefit	2,241
Employer DB contributions	98
Benefit payments	40
Defined benefit asset mix:	
Stocks	55%
Fixed income	35%
Real estate equity	6%
Other	4%

NEW YORK — As of Sept. 30, the National Benefit Fund for Hospital & Health Care Employees' total employee benefit assets increased 18.7% to $2.241 billion from $1.888 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — FLA Asset Management; Lehman; and Loomis Sayles.

Fixed-income managers: Domestic — Amalgamated Bank; Criterion; Pacific Investment; and State Street Bank.

Real estate managers: Equitable and Prudential.

The master trustee is Northern Trust. The investment consultant is Marco Group.

Key personnel overseeing the investment management of the fund are I.S. Forman, first vice chairman, and August D. Cademartori and Allen C. Abramson, executive committee members.

Hughes Aircraft Co.

	($ millions)
Total assets	6,572
Defined benefit	4,500
Defined contribution	2,072
Profit-sharing	2,072
Employer DB contributions	0
Benefit payments	150
Employer DC contributions	45
Internally managed assets:	
Total DB	1,000
Total DC	1,100
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	

LOS ANGELES — As of Sept. 30, 1989, Hughes Aircraft Co.'s total employee benefit assets increased 28% to $6.572 billion from $5.136 billion a year earlier. Defined benefit assets increased 34.9% during the same period, to $4.5 billion from $3.336 billion. Defined contribution assets increased 15.1%, to $2.072 billion from $1.8 billion.

The master trustee and global custodian is Bankers Trust.

The key person overseeing the investment management of the fund is W. Allen Reed, staff vice president-investment management.

I.A.M. National Pension Fund

	($ millions)
Total assets	1,695
Defined benefit	1,693
Defined contribution	2
Other	2
Employer DB contributions	67
Benefit payments	77
Employer DC contributions	1
Defined benefit asset mix:	
Stocks	51.7%
Fixed income	41.5%
Cash equivalents	4.2%
Real estate equity	2.6%
Defined contribution asset mix:	
Cash equivalents	100%

WASHINGTON — As of Sept. 30, the I.A.M. National Pension Fund's total employee benefit assets increased 17.9% to $1.695 billion from $1.438 billion a year earlier. Defined benefit assets also increased 17.9% during the same period, to $1.693 billion from $1.436 billion. Defined contribution assets were flat at $2 million.

Equity managers: Domestic — Dodge & Cox; Lazard Freres; State Street Bank; and Stein Roe.

Fixed-income managers: Domestic — Dodge & Cox; Lazard Freres; State Street Bank; and Stein Roe.

Real estate manager: National Bank of Washington.

The master trustee is State Street Bank.

The board of trustees oversees the investment management of the fund.

IBM Corp.

	($ millions)
Total assets	25,775
Defined benefit	22,500
Defined contribution	3,275
401(k)	3,275
Employer DB contributions	0
Benefit payments	620
Employer DC contributions	100
Internally managed assets:	
Total DB	12,600
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	

STAMFORD, Conn. — As of Sept. 30, IBM Corp.'s total employee benefit assets increased 18.4% to $25.775 billion from $21.761 billion a year earlier. Defined benefit assets increased 16.4% during the same period, to $22.5 billion from $19.332 billion. Defined contribution assets increased 34.8%, to $3.275 billion from $2.429 billion.

Equity managers: Domestic — Alliance; Butler; Chancellor; Columbus Circle; Delaware; Dillon, Read; DFA; Fidelity Investment; Forstmann Little; F.S. Equity; Independence Investment; John Hancock; Lincoln Capital; NCM; Resource Investors; Sasco; State Street Bank; Warburg, Pincus; and Wellington.

International — Capital Guardian; DFA; Matuschka; Oechsle; Rowe Price-Fleming; and State Street Bank.

Fixed income: Domestic — BEA; Discount Corp. of New York; Fischer, Francis, Trees & Watts; Hoisington; Lincoln Capital; Miller, Anderson & Sherrerd; and PIMCO.

International — Morgan Grenfell and WorldInvest.

Real estate managers: AEW; Cabot, Cabot & Forbes; Dreyfus; Equitable; and Prudential.

The master trustee and global custodian is Chase Manhattan; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are J. Grills, assistant treasurer; C.F. Wolfe, director-investment strategy; and A.M. Shagory, director-investment research and operations.

Public Employees Retirement System of Idaho

	($ millions)
Total assets	1,643
Defined benefit	1,643
Employer DB contributions	89
Benefit payments	91
Internally managed assets	25
Defined benefit asset mix:	
Stocks	43%
Fixed income	36%
Cash equivalents	2%

Top 200 funds with assets in real estate equity

Defined benefit

Fund	($ millions)
AT&T	3,897
California Employees	3,300
Ohio State Teachers	2,034
General Electric	1,977
Washington State Board	1,229
California State Teachers	1,188
State of Michigan	1,119
Connecticut Trust Funds	1,116
Ameritech	1,000
NYNEX	964
United Nations Joint Staff	956
Virginia Supplemental	921
Illinois Teachers	886
New York State & Local	809
Ford Motor	800
Pennsylvania Employes	753
Florida State Board	751
Southwestern Bell	749
Eastman Kodak	730
Pennsylvania Schools	672
Ohio Public Employees	646
U S WEST	620
Westinghouse Electric	533
United Technologies	525
Minnesota State Board	511
Prudential Insurance	484
Oregon Public Employes	470
Wisconsin State Board	469
Colorado Employees	457
Illinois State Universities	449
Iowa Public Employees	442
Shell Oil	430
Illinois Municipal	398
New York State Teachers	366
Exxon	357
Allied-Signal	355
Chevron	326
Ohio School Employees	302
Pacific Gas & Electric	292
Kansas Public Employees	291
Illinois State Board	290
Nat'l Electrical Contractors	279
Hawaii State Employees	278
Monsanto	275
Los Angeles County	266
Utah State Retirement	252
Caterpillar	249
Alaska Retirement Systems	239
Maryland State Systems	238
Unisys	236
USX	225
Owens-Illinois	200
Presbyterian Church	200
Nevada Public Employees	199
Textron	192
World Bank	186
North Carolina	183
Ohio Police & Firemen	175
Minnesota Mining & Mfg.	174
Honeywell	173
RJR Nabisco	162
United Airlines	155
UMWA	150
Hercules	132
Idaho Public Employees	131
Hospital/Healthcare	130
San Francisco City/County	130
Chrysler	128
Inland Steel	125
Philadelphia City	121
Amoco	118
BP America	116

Fund	($ millions)
Grumman	115
ITT	115
Philip Morris	110
J.C. Penney	107
Aetna	104
Los Angeles Fire & Police	104
S. New England Telephone	100
GTE	96
Kentucky Retirement Systems	96
Detroit Systems	93
FPL Group	91
Texaco	91
CIGNA	90
Sears, Roebuck	88
Southern California UFCW	82
Delta Air Lines	80
Equitable Life Assurance	78
E.I. du Pont de Nemours	77
Travelers	73
Eli Lilly	69
Southern California Edison	67
Aluminum Co. of America	64
Chicago Municipal	64
Union Carbide	61
Plumbers National HQ	58
United Methodist Church	57
Louisiana State Employees	53
Maine State Retirement	53
Deere	50
K mart	49
Anheuser-Busch	48
GenCorp	46
Rhode Island Retirement	46
I.A.M. National Pension	44
Kentucky Teachers	41
Operating Engineers	34
Milwaukee City	33
New York Life	30
Phillips Petroleum	30
Chase Manhattan	23
Los Angeles City	23
Trans World Airlines	20
Southern Baptist	18
American Electric Power	15
Xerox	15
Raytheon	14
Bank of America	13
Alabama Systems	12
Teamsters, Central States	11
United Parcel Service	11
General Dynamics	5
Armco	4
Indiana Public Employees	4
Total	**43,656**

Defined contribution

Fund	($ millions)
TIAA-CREF	3,000
Xerox	240
Trans World Airlines	95
American Stores	76
Bechtel Power	72
United Methodist Church	62
United Parcel Service	37
Halliburton	33
Detroit Systems	15
Nat'l Electrical Contractors	13
Equitable Life Assurance	3
Evangelical Lutheran	3
Eli Lilly	1
Total	**3,650**

Real estate equity	8%
Mortgages	7%
International equities	4%

BOISE, Idaho — As of Sept. 30, the Public Employees Retirement System of Idaho's total employee benefit assets increased 23.1% to $1.643 billion from $1.335 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Columbus Circle; Eaton Vance; Husic Capital; Mellon Capital; Mountain Pacific; Newell Associates; and Wellington.

International — Boston International; Rowe Price-Fleming; and Schroder Capital.

Fixed-income managers: Domestic — Sanford Bernstein; BEA; D.B. Fitzpatrick; and State Street Bank.

Real estate managers: Cabot, Cabot & Forbes; Equitable; LaSalle; J.W. O'Connor; and Prudential.

The master custodian and global trustee is Mellon Bank; the investment consultant is Dorn & Helliesen.

Philip Halpern is senior investment manager.

Illinois State Board of Investment

	($ millions)
Total assets	3,173
Defined benefit	3,173

Internally managed assets	1,200
Hedging devices used:	
Stock options	
Stock index futures	
Defined benefit asset mix:	
Stocks	44%
Fixed income	36%
Cash equivalents	6%
Real estate equity	9%
Mortgages	2%
Other	3%

CHICAGO — As of Sept. 30, the Illinois State Board of Investment's total employee benefit assets increased 17.5% to $3.173 billion from $2.7 billion as of June 30, 1988. All assets are defined benefit.

Equity managers: Domestic — Ariel; Cooke & Bieler; Disciplined; Fidelity Management; Lazard Freres; Lincoln; Newbold's; TCW; and Trinity.

International — Acadian; Brinson Partners; Globe Finlay; Hill Samuel; and Templeton.

Fixed-income managers: Domestic — Calamos; Delaware; Fidelity Management; J.P. Morgan; and TCW Global.

Real estate managers: Aetna; Amli; Heitman; JMB; Public Storage; TCW; and Zell Merrill Lynch.

LBO managers: KKR and Lazard Freres.

Venture capital managers: Frontenac; Golder Thoma Cressey; John Hancock; Menlo; and Prudential.

Other manager: Candover Partners.

Northern Trust is the master custodian and global custodian; the investment consultants are Callan and PCA.

Key personnel overseeing the investment management of the fund are Gregory C. Nagle, director; Larry Darlington, fixed-income portfolio manager; and Scott Pape, equity portfolio manager.

Illinois Municipal Retirement Fund

	($ millions)
Total assets*	4,326
Defined benefit	4,326
Employer DB contributions	171
Benefit payments	211

**as of Aug. 31, 1989*

Internally managed assets:	145
Hedging devices used:	
Bond options	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	45.1%
Foreign stocks	8.9%
Fixed income	29.4%
Foreign bonds	2.7%
Cash equivalents	3.4%
Real estate equity	9.2%
Venture capital	1.3%

CHICAGO — As of Aug. 31, 1989, Illinois Municipal Retirement Fund's total employee benefit assets increased 20.5% to $4.326 billion from $3.591 billion as of Sept. 30, 1988. All assets are defined benefit.

Equity managers: Domestic — American National Bank; Campbell, Cowperthwait; Dillon Read; Dimensional; Fidelity Management; Frontier; Lincoln Capital; and Provident Investment.

International — American National Bank; Baring; Nomura; Schroder; and TIMCO.

Fixed-income managers: Domestic — American National Bank; Criterion; Fidelity Management; Neuberger & Berman; and Payden & Rygel.

International — Julius Baer.

Real estate managers: Brinson Partners; Equitable Real Estate; JMB; LaSalle; RREEF; Sentinel; and TCW.

Venture capital managers: Abbott; Brinson Partners; Larimer; and Oxford.

The master trustee is Northern Trust; the global custodian is Northern Trust-London; the investment consultants are Mercer Meidinger Hansen and Institutional Property Consultants.

Key personnel overseeing the investment management of the fund are Robert L. Cusma, executive director; Hiroshige Mori, director-investments; and Walter J. Koziol, investment manager.

Teachers' Retirement System of the State of Illinois

	($ millions)
Total assets	8,475
Defined benefit	8,475
Employer DB contributions	261
Benefit payments	477

Hedging devices used:	
Stock options	
Bond options	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	48%
Fixed income	35%
Cash equivalents	6%
Real estate equity	11%

SPRINGFIELD, Ill. — As of Sept. 30, Teachers' Retirement System of the State of Illinois' total employee benefit assets increased 20.3% to $8.475 billion from $7.043 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; American National Bank; Ariel; Brandywine; Brinson Partners; Cedar Hill; Eagle; Hotchkis and Wiley; Husic; Keystone; Lazard Freres; Lehman Ark; Lincoln; Morgan Stanley; Munder; NCM; Oppenheimer; RCM.

International — Murray Johnstone and State Street Bank.

Fixed-income managers: Domestic — Bear Stearns; PIMCO; and State Street Bank.

International — Brinson Partners.

Real estate managers: Bennett & Kahnweiler; F.I.A.; First Chicago; JMB; Jones Lang Wootton; and TCW.

Currency managers: Matuschka and N.M. Rothschild International.

Venture capital manager: Frontenac.

The master trustee is Harris Trust; the global custodian is State Street; the investment consultant is Callan.

The key person overseeing the investment management of the fund is William M. Stephens, chief investment officer.

State Universities Retirement System of Illinois

	($ millions)
Total assets	3,845
Defined benefit	3,845
Employer DB contributions	93
Benefit payments	166

Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed income futures	
Defined benefit asset mix:	
Stocks	59%
Fixed income	29%
Real estate equity	12%

CHAMPAIGN, Ill. — As of Sept. 30, the State Universities Retirement System of Illinois' total employee benefit assets increased 24.8% to $3.845 billion from $3.08 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Batterymarch; PIMCO; Fayez Sarofim; and Wells Fargo.

International — Wells Fargo.

Fixed-income managers: Domestic — PIMCO and Wells Fargo.

Real estate managers: Aetna; Equitable; JMB; and RREEF.

The master custodian is Northern Trust; the investment consultant is Ennis, Knupp.

Key personnel overseeing the investment management of the fund are Kenneth Codlin, investment officer, and Jeanne Valcik, associate investment officer.

Indiana Public Employees' Retirement System

	($ millions)
Total assets	2,817
Defined benefit	2,248
Defined contribution	569
Other	569
Employer DB contributions	160
Benefit payments	109
Defined benefit asset mix:	
Fixed income	100%
Defined contribution asset mix:	
Fixed income	100%

INDIANAPOLIS — As of Sept. 30, the State of Indiana Public Employees' Retirement System's total employee benefit assets decreased 3.8% to $2.817 billion from $2.927 billion a year earlier. Defined contribution assets are a mandatory employee contributory plan listed last year as part of the defined benefit plan.

Fixed-income managers: Domestic — Bank One Indianapolis; Indiana National Bank; Lehman Ark; T. Rowe Price; and Prime Capital.

The investment consultant is Performance Analytics Inc.

Key personnel overseeing the investment management of the fund are Phillip Smith, executive secretary; Michael A. Cherry, information officer; and Donal Bayne, controller.

Indiana State Teachers' Retirement Fund

	($ millions)
Total assets	1,700
Defined contribution	1,700
Other	1,700
Employer DC contributions	193

Defined contribution asset mix:	
Fixed income	100%

INDIANAPOLIS — As of Sept. 30, the Indiana State Teachers' Retirement Fund's total employee benefit assets increased 13.3% to $1.7 billion from $1.5 billion a year earlier. All assets are in an annuity purchase plan.

Fixed-income managers: Domestic — Alliance; Bank of New York; Bank One, Indianapolis; Baxter & Hoops; Indiana National Bank; Merchants Investment Counseling; and Todd.

The master trustee is Indiana National Bank.

Robert D. Newland is investment officer.

Inland Steel Industries Inc.

	($ millions)
Total assets	2,041
Defined benefit	1,655
Defined contribution	386
Other	386
Employer DB contributions	0
Benefit payments	106
Employer DC contributions	10

Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	51.1%
Fixed income	27.5%
Cash equivalents	10.3%
Real estate equity	7.4%
GICs/BICs	3.7%
Defined contribution asset mix:	
Company stock	10.4%
Other stock	4.3%
GICs/BICs	85.3%

CHICAGO — As of Sept. 30, Inland Steel Industries Inc.'s total employee benefit assets increased 20.1% to $2.041 billion from $1.7 billion a year earlier. Defined benefit assets increased 18.2% during the same period, to $1.655 billion from $1.4 billion. Defined contribution assets increased 28.7% to $386 million from $300 million.

Equity managers: Domestic — Sanford Bernstein; Brinson Partners; Chancellor; Dillon, Read; DFA; INVESCO; Oppenheimer; Putnam Advisory; State Street Research; and Waddell & Read.

International — Baring International; Brinson Partners; and Putnam International.

Fixed-income manager: Domestic — Lincoln Income Group.

Real estate managers: Cabot, Cabot & Forbes; Equitable; Grubb & Ellis; JMB; Prudential; and Zell Merrill Lynch.

The master trustee is Northern Trust; the global custodian is Northern Trust/Banc Scandinave; the investment consultant is DeMarche Associates.

The key personnel overseeing the investment management of the funds' assets are Jay E. Dittus, treasurer; Richard J. Schutter, director-pension investments and administration; and Vicki L. Avril, manager-pension investments.

International Paper Co.

	($ millions)
Total assets*	2,709
Defined benefit	2,100
Defined contribution	609
Employer DB contributions	90

**From Money Market Directory*

PURCHASE, N.Y. — According to Money Market Directory, International Paper Co. had $2.709 billion in total employee benefit assets as of July 31, an increase of 20.3% from $2.252 billion as of Sept. 30, 1988. Defined benefit assets increased 13.5% to $2.1 billion from $1.851 billion during the same period. Defined contribution assets increased 51.9% to $609 million from $401 million.

Myra Drucker, director-trust investments, oversees investment management of the fund.

Iowa Public Employees Retirement System

	($ millions)
Total assets	4,900
Defined benefit	4,900
Employer DB contributions	135
Benefit payments	155

Internally managed assets	88
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	39%
Fixed income	42%
Cash equivalents	2%
Real estate equity	10%
Other	7%

DES MOINES, Iowa — As of Sept. 30, the Iowa Public Employees Retirement System's total employee benefit assets were $4.9 billion. All assets are defined benefit.

Equity managers: Domestic — Batterymarch; Capital Guardian; Invista; Mellon Capital; Prudential; RCM; and Wellington.

International — Hill Samuel; Nomura; Philippe; and Schroder.

Fixed-income managers: Domestic — Boston Co.; Criterion; Loomis, Sayles; Miller, Anderson & Sherrerd; and J.P. Morgan.

Real estate managers: AEW; Copley; Heitman; and JMB.

Other managers: Allsop; Cable & Howse; Gibbons, Green; Golder, Thoma; Interven; Invest America; KKR; Lawrence; Menlo; Steinberg, Lyman; Summit; TCW; and WCAS.

The master trustee and global custodian is Boston Safe Deposit; the investment management consultant is Wilshire Associates.

Key personnel overseeing the investment management of the fund are Dennis Jacobs, deputy administrator-investments, and Larry Thompson, investment officer.

ITT Corp.

	($ millions)
Total assets	2,497
Defined benefit	1,615
Defined contribution	882
Thrift or savings	882
Employer DB contributions	32
Benefit payments	84

Top 200 plans with assets in venture capital

Defined benefit

Fund	($ millions)
AT&T	500
Washington State Board	348
State of Michigan	269
General Electric	250
GTE	200
U S WEST	200
Ameritech	170
University of California	144
Illinois Teachers	137
Los Angeles County	137
Chicago Municipal	85
Honeywell	81
United Technologies	80
Minnesota State Board	75
Sears, Roebuck	74
California State Teachers	71
Southwestern Bell	70
Oregon Public Employes	67
Pennsylvania Employes	66
Exxon	63
E.I. du Pont de Nemours	62
Unisys	61
Ford Motor	60
Pennsylvania Schools	60
Illinois Municipal	57
New York State & Local	53
NYNEX	53
Wisconsin State Board	52
Aluminum Co. of America	50
Delta Air Lines	50
Philip Morris	50
Prudential Insurance	44
American Electric Power	38
Colorado Employees	37
New York State Teachers	36
Illinois State Board	35
Owens-Illinois	35
BP America	31
Utah State	30
World Bank	29
Southern California Edison	29
Ohio Public Employees	27
Ohio School Employees	27
Deere	25
Iowa Public Employees	24
TRW	24
Chevron	23
Westinghouse Electric	23
Ohio State Teachers	22
Connecticut Trust Funds	20
J.C. Penney	17
Grumman	15
Ohio Police & Firemen	13
S. New England Telephone	11
Bank of America	10
San Francisco City/County	10
Textron	9
Nevada Public Employees	8
Rhode Island	7
Minnesota Mining & Mfg.	6
Armco	6
Eli Lilly	6
Inland Steel	5
Oklahoma Teachers	5
Philadelphia City	5
Tenneco	4
Virginia Supplemental	3
Xerox	1
Total	**4,395**

Defined contribution

Fund	($ millions)
Xerox	17
University of California	5
Pan Am	3
Total	**25**

Defined benefit asset mix:	
Stocks	62%
Fixed income	21%
Cash equivalents	6%
Real estate equity	7%
Other	4%
Defined contribution asset mix:	
Company stock	35%
Other stock	10%
Cash equivalents	4%
GICs/BICs	51%

NEW YORK — As of Sept. 30, ITT Corp.'s total employee benefit assets decreased 4% to $2.497 billion from $2.602 billion a year earlier. Defined benefit assets decreased 13.7% during the same period, to $1.615 billion from $1.871 billion. Defined contribution assets increased 20.7% to $882 million from $731 million.

Equity managers: Domestic — Alliance; American Fund; Barrow, Hanley, Mewhinney & Strauss; First Manhattan; GAMCO; Jennison; Northern Investment Management; and Verus Capital.

International — Alliance International; Capital Guardian; and Lazard Freres.

Fixed-income managers: Domestic — Alliance; J.P. Morgan; and State Street Research.

International — J.P. Morgan and WorldInvest.

Real estate managers: Coldwell Banker; Corporate Property Investors; Equitable; Metropolitan; and RREEF.

Other managers: Blackstone; Alex. Brown; Butler Capital; Corporate Advisors; Harry Gray; Kohlberg & Co.; KKR; and Morgan Petroleum.

The master trustee is Northern Trust; the global custodian is Northern Trust London.

Key personnel overseeing the investment management of the fund are Edwin J. Ehrlich, director-pension fund trusts; and Eileen C. Leahy, manager-pension fund trusts.

K

K mart Corp.

	($ millions)
Total assets	1,775
Defined benefit	1,084
Defined contribution	691
Other	691
Employer DB contributions	0
Benefit payments	33
Employer DC contributions	37
Internally managed assets:	
Total DB	237
Hedging devices used:	
Stock options	
Stock index futures	
Defined benefit asset mix:	
Stocks	55.2%
Fixed income	21.8%
Cash equivalents	7.1%
Real estate equity	4.5%
GICs/BICs	9.5%
Annuities	1.9%
Defined contribution asset mix:	
Company stock	41.7%
Other stock	8.5%
GICs/BICs	49.8%

TROY, Mich. — As of Sept. 30, K mart Corp.'s total employee benefit assets increased 17.6% to $1.775 billion from $1.509 billion as of June 30, 1988. Defined benefit assets increased 16.4% during the same period, to $1.084 billion from $931 million. Defined contribution assets increased 19.6%, to $691 million from $578 million.

Equity managers: Domestic — Alliance; Avatar; Capital Guardian; DFA; and Westridge.

Real estate managers: Equitec and JMB.

GIC managers: New York Life and Pacific Mutual.

Annuity manager: John Hancock.

The master trustee is National Bank of Detroit.

Key personnel overseeing the investment management of the fund are John Steinbach, assistant treasurer and investment manager, and William F. Camp, assistant investment manager.

Kansas Public Employees Retirement System

	($ millions)
Total assets	3,692
Defined benefit	3,692
Employer DB contributions	77
Benefit payments	152
Internally managed assets	92
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	31.7%
Fixed income	32.6%
Cash equivalents	12.2%
Real estate equity	8.1%
Other	15.4%

TOPEKA, Kan. — As of Sept. 30, the Kansas Public Employees Retirement System's total employee benefit assets increased 16.3% to $3.692 billion from $3.175 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Capital Supervisors; Delaware Investment; Loomis, Sayles; Market Research Management; Pilgrim Baxter Greig; and Provident Investment.

International — Alliance and Nomura.

Fixed-income managers: Domestic — Loomis, Sayles; Peters, Gamm & West; and PIMCO.

International — Julius Baer.

Real estate managers: Lehndorff & Babson and O'Connor Group.

Cash manager: Payden & Rygel.

Direct placement managers: Reimer & Koger and Peters, Gamm & West.

The master custodian is Commerce Bank & Trust; the global custodian is Bankers Trust; the investment consultant is Callan.

Key personnel overseeing the investment management of the fund are Tom Hamill, chairman-board of trustees, and Marshall Crowther, executive secretary.

Kentucky Retirement Systems

	($ millions)
Total assets	3,200
Defined benefit	3,200
Employer DB contributions	196
Benefit payments	120
Internally managed assets:	
Total DB	1,300
Defined benefit asset mix:	
Stocks	37%
Fixed income	35%
Cash equivalents	25%
Real estate equity	3%

FRANKFORT, Ky. — As of Sept. 30, the Kentucky Retirement Systems' total employee benefit assets increased 28% to $3.2 billion from $2.5 billion a year earlier. All assets are defined benefit.

Equity manager: Domestic — Capital Supervisors.

Fixed-income managers: Domestic — Capital Supervisors and Munder Capital.

Real estate manager: Heitman.

The master trustee is Farmers Bank & Capital Trust; the investment consultant is Mercer Meidinger Hansen.

Key person overseeing the investment management of the fund is Marlene O. Castle, investment officer.

Kentucky Teachers' Retirement System

	($ millions)
Total assets	3,461
Defined benefit	3,461
Employer DB contributions	178
Benefit payments	195
Internally managed assets	262
Defined benefit asset mix:	
Stocks	29%
Fixed income	49%
Cash equivalents	9%
Real estate equity	1%

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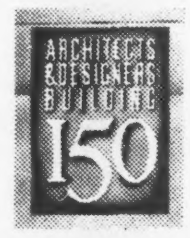

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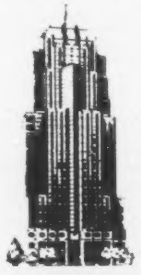

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Partnership

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General Services Administration
Arranged for:
STEIN&COMPANY

MORGAN STANLEY REALTY

Mortgages	3%
Mortgage-backed securities	9%

FRANKFORT, Ky. — As of Sept. 30, the Kentucky Teachers' Retirement System's total employee benefit assets increased 21.9% to $3.461 billion from $2.84 billion as of June 30, 1988. All assets are in defined benefit plans.

Equity managers: Domestic — INVESCO and Todd.

Fixed-income managers: Domestic — First Kentucky Co. and Todd.

The master custodian is Farmers *Bank & Capital Trust.*

Key personnel overseeing the investment management of the fund are Pat Miller, executive secretary; Stuart Reagan, chief investment officer; and Paul Yancey, investment analyst.

L

Eli Lilly & Co.

	($ millions)
Total assets	2,432
Defined benefit	1,410
Defined contribution	1,022
401(k)/KSOP	1,022
Employer DB contributions	42
Benefit payments	58
Employer DC contributions	31
Internally managed assets:	
Total DC	315
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	66.3%
Fixed income	13.1%
Cash equivalents	10.7%
Real estate equity	4.7%
GICs/BICs	4.5%
Other	0.7%
Defined contribution asset mix:	
Company stock	63%
Other stock	9%
Fixed income	1%
GICs/BICs	27%

Top 200 funds with assets in dedicated/immunized bonds

Defined benefit

Fund	($ millions)
Maryland State Systems	5,011
Minnesota State Board	4,800
Ameritech	3,300
U S WEST	2,700
General Electric	2,258
Southwestern Bell	2,084
Navistar	1,855
UMWA	1,700
Aluminum Co. of America	1,524
Caterpillar	1,080
American Airlines	1,000
Equitable Life	634
Armco	575
Tennessee Valley Authority	567
PPG Industries	532
Raytheon	486
Deere	485
Nevada Public Employees	473
Inland Steel	468
Unisys	428
Hercules	379
Milwaukee City	378
Ohio State Teachers	272
Phillips Petroleum	200
Pennsylvania Schools	179
Florida State Board	155
S. New England Telephone	153
Pan Am	97
Procter & Gamble	94
Teamsters, Central States	75
United Technologies	60
United Methodist Church	57
Bakery & Confectionery	20
Hospital/Healthcare	2
Total	**34,081**

Defined contribution

Fund	($ millions)
United Methodist Church	182
Unisys	144
New York Life	7
Total	**333**

INDIANAPOLIS — As of Sept. 30, Eli Lilly & Co.'s total employee benefit assets increased 30.3% to $2.432 billion from $1.867 billion a year earlier. Defined benefit assets increased 29.5% during the same period, to $1.41 billion from $1.089 billion. Defined contribution assets increased 31.4%, to $1.022 billion from $778 million.

Equity managers: Domestic — Ardsley; Capital Guardian; Mellon Capital; Northern Investment; Reams; W.H. Reaves; and United Capital.

International — Nikko and State Street.

Bond manager: Reams.

Real estate managers: GE Investment; JMB; and RREEF.

GIC managers: Bank One, Indianapolis and Northern Investment.

Venture capital managers: Battery Ventures; Cable & Howse; CID; DSV; Prime Capital; RCS; and Summit.

LBO manager: Harbour Group.

The master trustee is Northern Trust.

Key personnel overseeing the investment management of the fund are Frederick W. Ruebeck, director-investments administration; Karen L. Hardwick, financial associate; and Michael W. Neal, financial adviser.

Lockheed Corp.

	($ millions)
Total assets*	8,926
Defined benefit	6,247
Defined contribution	2,679

**P&I estimate*

CALABASAS, Calif. — As of Sept. 30, *Pensions & Investments* estimates Lockheed Corp.'s total employee benefit assets were $8.926 billion, based on the $7.411 the company said it had as of Dec. 31, 1988.

Managers: — Alliance; Anhalt/O'Connell; Bankers Trust; Batterymarch; Capital Guardian; Chase Investors; Chancellor; Delaware Investment; DSI International; First Interstate, Washington; Hotchkis and Wiley; Karsten; Investment Research; Lombard Odier; Mellon Bank; Mitchell Hutchins; J.P. Morgan; Pacific Financial; Payden & Rygel; RREEF; SBC; Fayez Sarofim; Security Pacific; Smith Barney; TCW; Western Asset; Westwood Management; and Wright.

Bankers Trust is the master trustee and global custodian.

Key personnel overseeing the investment management of the fund are George C. Weintz, investment counsel, and Sheldon J. Lieberman, trust fund performance manager.

Los Angeles City Retirement System

Total assets*	2,497
Defined benefit	2,497
Employer DB contributions	167
Benefit payments	147

**as of June 30, 1989*

Internally managed assets:	
Total DB	316
Defined benefit asset mix:	
Stocks	38.27%
Fixed income	48.15%
Cash equivalents	12.65%
Real estate equity	0.93%

LOS ANGELES — As of June 30, Los Angeles City Retirement System's total employee benefit assets increased 13.9% to $2.497 billion from $2.193 billion nine months earlier. All assets are defined benefit.

Equity managers: Domestic — Ariel; Bailard, Biehl & Kaiser; Bankers Trust; Loomis, Sayles; and Security Pacific Investment Management.

Fixed-income managers: Domestic — Chemical Investment and Loomis Sayles.

Real estate managers: AEW; LaSalle; Lehndorff & Babson.

The master custodian is Bank of New York; the investment consultant is SEI.

Key personnel overseeing the investment management of the fund are Jerry Bardwell, general manager; Daniel Gallagher, investment officer; and Oscar Peters, assistant general manager.

Los Angeles County Employees' Retirement Association

	($ millions)
Total assets*	9,359
Defined benefit	9,359
Employer DB contributions	384
Benefit payments	390

**as of June 30, 1989*

Internally managed assets:	
Total DB	69
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	40.02%
Fixed income	32.5%
Cash equivalents	21.97%
Real estate equity	2.84%
Mortgages	1.21%
Venture capital	1.46%

LOS ANGELES — As of June, 30, Los Angeles County Employees' Retirement Association's total employee benefit assets increased 7% to $9.359 billion from $8.744 billion nine months earlier. All assets are defined benefit.

Equity managers: Domestic — Capital Guardian; Loomis, Sayles; Security Pacific; Stein, Roe; Morgan Stanley Asset; Pacific Century; Putnam Advisory; Pilgrim, Baxter, Greig; and Weiss, Peck & Greer.

International — Brown Brothers Harriman; Capital Guardian; Chase Investors; Daiwa; Morgan Grenfell; Warburg Investment.

Fixed-income managers: Domestic — Brown Brothers Harriman; Capital Guardian;CMB Investment; Criterion; Massachusetts Financial; and J.P. Morgan.

Real estate managers: Equitable; Goldman, Sachs; Heitman; JMB: Prudential; PSI; Sentinel; Shurgard; TCW; and Trammell Crow.

Short-term/cash manager: Discount Corp. of New York.

Venture capital managers: Copley Venture Partners; Harry Gray, Mel Klein & Partners; Prudential; TA Associates Communications; E.M. Warburg, Pincus.

The master custodian is Security Pacific; the global custodian is Chase Manhattan; the investment consultant is Callan.

Key personnel overseeing the investment management of the fund are Charles F. Conrad, retirement administrator; Diane Sandoval, manager, retirement accounting; and Fred Whiting, manager retirement systems.

Los Angeles Fire & Police Pension System

	($ millions)
Total assets	3,477
Defined benefit	3,477
Employer DB contributions	288
Benefit payments	247
Internally managed assets:	
Total DB	157
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	66.3%
Fixed income	26.2%
Cash equivalents	4.5%
Real estate equity	3%

LOS ANGELES — As of Sept. 30, Los Angeles Fire & Police Pension System's total employee benefit assets increased 25.3% to $3.477 billion from $2.774 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; Amerindo; Balch Hardy; BMI; Frontier; Husic; Loomis, Sayles; MCQ; Oppenheimer; Security Pacific; and Target.

International: Globe Finlay; Hill Samuel; Nomura; and Oechsle.

Fixed-income managers: Domestic — Boston Co.; Cypress; Magten; and Security Pacific.

Real estate managers: Boston Co.; Equitable; JMB; Prudential; Sentinel.

The master custodian and global custodian is Bankers Trust.

Key personnel overseeing the investment management of the fund are Gary Mattingly, general manager; Allan Moore, assistant manager; and Dennis Sugino, chief investment officer.

Los Angeles Department of Water & Power Employees' Retirement Plan

	($ millions)
Total assets*	1,800
Defined benefit	1,800
Employer DB contributions	115
Benefit payments	112

**as of June 30, 1989*

Internally managed assets:	
Total DB	100
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	33%
Fixed income	48%
Cash equivalents	10%
Mortgages	9%

LOS ANGELES — As of June 30, the Los Angeles Department of Water and Power Employees' Retirement Plan's total employee benefit assets increased 19.7% to $1.8 billion from $1.504 billion a year earlier. All assets are defined benefit.

Managers: Boston Co.; Merus; and TCW.

The master trustee is Security Pacific.

Key person overseeing the investment management of the fund is Clarence Brawn, investment manager.

Louisiana State Employees' Retirement System

	($ millions)
Total assets	2,250
Defined benefit	2,250
Employer DB contributions	133
Benefit payments	223
Internally managed assets	542
Defined benefit asset mix:	
Stocks	24%
Fixed income	58%
Cash equivalents	15%
Real estate equity	2%
CDs	1%

BATON ROUGE, La. — As of Sept. 30, the Louisiana State Employees' Retirement System's total employee benefit assets increased 12.4% to $2.25 billion from $2.001 billion a year earlier. All the assets are defined benefit.

Equity managers: Domestic — Boston Co.; Eagle Asset; and Merus.

Fixed-income managers: Domestic — Denver Investment; Duff & Phelps; INVESCO; and Mitchell Hutchins.

Real estate managers: Equitable; JMB; Metropolitan Life; and PSI.

The master trustee is Bank of New York; the investment consultant is SEI.

Key personnel overseeing the investment management of the fund are Vernon L. Strickland, chief investment officer; and Nick Montagnino Jr. and Calla E. McManus, investment officers.

Teachers' Retirement System of Louisiana

	($ millions)
Total assets*	3,265
Defined benefit	3,265
Employer DB contributions	198
Benefit payments	350

**as of June 30, 1989*

Internally managed assets	520
Defined benefit asset mix:	
Stocks	28%
Fixed income	55%
Cash equivalents	17%

BATON ROUGE, La. — As of June 30, the Teachers' Retirement System of Louisiana's total employee benefit assets increased 15.2% to $3.265 billion from $2.833 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Boston Co.; Eagle; INVESCO; and Sun Bank.

Fixed-income managers: Domestic — Boatmen's; Criterion; Hibernia; Massachusetts Financial; and Scudder, Stevens & Clark.

The master custodian is City National Bank of Baton Rouge; the investment consultant is SEI.

Key personnel overseeing the investment management of the fund are

Top 200 funds with assets in mortgage-backed securities

Defined benefit

Fund	($ millions)
New York City	8,478
California Employees	8,400
Ohio Public Employees	4,100
Texas Teachers	3,500
New York State & Local	3,281
California State Teachers	3,185
New Jersey	3,180
Ohio State Teachers	1,926
Teamsters, Central States	1,827
North Carolina	1,717
E.I. du Pont de Nemours	1,485
New York State Teachers	1,424
State of Michigan	1,382
Pennsylvania Schools	1,263
Texas Employees	1,139
South Carolina	1,095
General Electric	1,007
Bethlehem Steel	935
Missouri Public Schools	808
Louisiana State	685
Indiana Public Employees	683
Tennessee Consolidated	600
Ohio School Employees	595
Los Angeles County	542
Alabama Systems	523
Pennsylvania Employes	516
Washington State Board	506
Kentucky Retirement	424
Iowa Public Employees	415
Ohio Police & Firemen	388
USX	365
Kentucky Teachers	321
Louisiana Teachers	300
Utah State Retirement	267
Maryland State Systems	244
Navistar	237
Connecticut Trust Funds	236
New Mexico Employees	220
GenCorp	205
Nevada Public Employees	190
Shell Oil	177
Exxon	176
Armco	172
Los Angeles Fire & Police	151
Illinois State Board	150
New Mexico Educational	146
Los Angeles Water & Power	143
Detroit Systems	123
Northrop	115
Bank of America	114
Inland Steel	114
Grumman	90
Commonwealth Edison	67
Oklahoma Teachers	51
Idaho Public Employees	50
Presbyterian Church	50
Kansas Public Employees	47
United Airlines	40
Tennessee Valley Authority	38
Owens-Illinois	35
Illinois Municipal	31
United Methodist Church	28
Operating Engineers	18
Hawaii State Employees	7
Pan Am	6
Nat'l Rural Electric Co-op	5
Total	**60,738**

Defined contribution

Fund	($ millions)
TIAA-CREF	2,000
Evangelical Lutheran	280
Detroit Systems	75
Bechtel Power	33
United Methodist Church	31
UMWA	1
Total	**2,420**

Jennifer Netterville, investment officer, and Carleton C. Page, director/secretary-treasurer.

Board of Pensions Evangelical Lutheran Church in America

	($ millions)
Total assets	1,782
Defined contribution	1,782
Other	1,782
Internally managed assets:	
Total DC	1,407
Defined contribution asset mix:	
Stock	47.5%
Fixed income	50.9%
Real estate/oil and gas	1%
Convertible securities	0.6%

MINNEAPOLIS — As of Sept. 30, the Board of Pensions Evangelical Lutheran Church in America's total employee benefit assets increased 25.5% to $1.782 billion from $1.42 billion a year earlier. All assets are in a defined contribution plan, a 403(b).

Equity managers: Domestic — Loomis Sayles; Merrill Lynch; and Wells Fargo.

International — Brinson Partners.

Fixed-income managers: Domestic — Baring America and London Investments.

The master trustee and the global custodian is Boston Safe.

The key person overseeing the investment management of the fund is John G. Kapanke, president.

M

Maine State Retirement System

	($ millions)
Total assets	1,800
Defined benefit	1,800
Employer contibutions	187
Benefit payments	168
Defined benefit asset mix:	
Stocks	51.6%
Fixed income	30.8%
Cash equivalents	14.5%
Real estate equity	3%
Oil & gas	0.1%

AUGUSTA, Maine — As of Sept. 30, Maine State Retirement System's total employee benefit assets increased 24% to $1.8 billion from $1.452 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; Columbus Circle; Dillon Read; Gouws Capital; and Lehman Management.

International — Bankers Trust and State Street.

Fixed-income managers: Domestic — Alliance; Massachusetts Financial; and Putnam Advisory.

Real estate manager: PCA.

The master custodian is Boston Safe Deposit; the investment consultant is Wilshire.

Key personnel overseeing the investment management of the fund are Claude R. Perrier, executive director, and William B. Ross, investment account coordinator.

Martin Marietta Corp.

	($ millions)
Total assets	3,201
Defined benefit	2,184
Defined contribution	1,017
Other	1,017
Employer DB contributions	2
Benefit payments	83
Employer DC contributions	41
Internally managed assets:	
Total DB	633
Defined benefit asset mix:	
Stocks	32%
Fixed income	14%
Cash equivalents	54%
Defined contribution asset mix:	
Company stock	11.8%
Other stock	23.5%
GICs/BICs	64.7%

BETHESDA, Md. — As of Sept. 30, Martin Marietta Corp.'s total employee benefit assets increased 13.1% to $3.201 billion from $2.829 billion a year earlier. Defined benefit assets increased 9.1% during the same period, to $2.184 billion from $2.001 billion. Defined contribution assets increased 22.8%, to $1.017 billion from $828 million.

Equity managers: Domestic — Breau Capital; Capital Guardian; Invista Capital; Pioneering Management; State Street Research; and Robert E. Torray.

Fixed-income manager: Domestic — T. Rowe Price.

The master trustee and global custodian is Bankers Trust; the investment consultant is Investment Management Controls/EAI.

Key personnel overseeing the investment management of the fund are Wayne H. Shaner, assistant treasurer-pension investments; Shawn M. Hendon, director-pension investments; and Wendy J. Thomson, administrator-pension investments.

Maryland State Retirement & Pension Systems

	($ millions)
Total assets	11,065
Defined benefit	11,065
Employer DB contributions*	597
Benefit payments*	493

**as of June 30, 1989*

Internally managed assets	8,328
Defined benefit asset mix:	
Stocks	31%
Fixed income	64%
Cash equivalents	1%
Real estate equity	2%
Other	2%

BALTIMORE — As of Sept. 30, the Maryland State Retirement & Pension Systems' employee benefit assets increased 26.9% to $11.065 billion from $8.717 billion a year earlier. All assets are in defined benefit plans.

Equity managers: Domestic — Bankers Trust; Capital Guardian; Dimensional; Hagler, Mastrovita & Hewitt; Investment Counselors of Maryland; Scudder, Stevens; and Wellington Trust.

Fixed-income managers: Domestic — Investment Counselors of Maryland; Mercantile Safe; Pacific Investment; and Standish, Ayer & Wood.

Real estate managers: CIGNA; Copley; J.P. Morgan; and Sentinel.

First National Bank of Maryland is custodian.

Key personnel overseeing the investment management of the fund are Howard J. France, chief investment officer; Lawrence J. Bach, director-passive management; and Arthur M. Lynch Jr., director-actively managed assets.

Public funds: Oct. 29.

Commonwealth of Massachusetts Teachers' and Employees' Pension Fund

	($millions)
Total assets*	6,650
Defined benefit	6,650
Employer DB contributions	1,121

**From Money Market Directory*

BOSTON — As of June 30, the Commonwealth of Massachusetts Teachers' & Employees' Pension Fund's total employee benefit assets were $6.65 billion, according to Money Market Directory. All assets are defined benefit.

Equity managers: Bailaird, Biehl & Kaiser; Capital Guardian; Constitution Capital; Gardner & Preston Moss; Guinness Mahon; Hagler, Mastrovita and Hewitt; J.M. Hartwell; Independence; INVESCO; Keystone; Manufac-

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turers Life; Massachusetts Financial; New Enterprise Association IV; One Federal Asset; Scudder, Stevens & Clark; Standish, Ayer & Wood; State Street Bank; State Street Research; Trinity; Wellington Management; and Wellington International.

Fixed-income managers: Delphi; Fiduciary Trust International; Gardner & Preston Moss; WR Lazard; Loomis, Sayles; Miller, Anderson and Sherrerd; PIMCO; and Standish, Ayer & Wood.

Real estate managers: Copley; Franklin; First Chicago; Hancock; Lehndorff & Babson; Narragansett; Pru-Bache Security; PSI; Sierra Capital; and State Street.

Venture capital/leveraged buy-out managers: Beta Partnership; Clayton & Dubilier; Frontenac; Hancock; Prudential; TA Associates; Vista; and WCAS Capital.

Key personnel overseeing the investment management of the fund are Robert Q. Crane, treasurer; Richard V. Kelly Sr., assistant treasurer; and Alan West, chief investment officer.

Massachusetts Pensions Reserve Investment Management Board

	($ millions)
Total assets	2,791
Internally managed assets:	
Total	29
Asset mix:	
Stocks	54.2%
Fixed income	30.4%
Cash equivalents	1%
Real estate equity	12.2%
Venture capital	2.2%

BOSTON — As of Sept. 30, Massachusetts Pensions Reserve Investment Management Board's total employee benefit assets increased 18.1% to $2.791 billion from $2.364 billion a year earlier.

Equity managers: Domestic — Alliance; Bear Stearns; Boston Co.; Lazard Freres; Trinity Investment; and U.S. Trust Co.

International — Baring; Oechsle; Schroder; Scudder, Stevens & Clark; and State Street.

Fixed-income managers: Domestic — Baring America; Lehman Ark; One Federal; Putnam; and M.D. Sass.

International — Baring International; N.M. Rothschild.

Real estate managers: AEW; Bank of Boston; Copley; Hancock; Heitman; JMB; Lomas & Nettleton; Massachusetts Mutual; and TCW.

Venture capital managers: Advent; Davis Venture; Golder, Thoma; John Hancock; Morgan Holland; Massachusetts Technology Development Corp.; Alan Patricof; Southern California Ventures; Venture Capital of New England; and Vista Ventures.

Special equities managers: Advent; Boston Ventures; Forstmann Little; INVESCO; KKR; MMG Patricof; Schroder UK Buyout Fund; Smith Offshore; and Weintraub.

The master custodian and global custodian is State Street Bank; the investment consultant is Wilshire.

Key personnel overseeing the investment management of the fund are Paul F. Quirk, executive director; Philip Kett, chief investment officer; and Elizabeth McLaughlin, finance director.

McDonnell Douglas Corp.

	($ millions)
Total assets	7,589
Defined benefit	5,911
Defined contribution	1,678

ST. LOUIS — As of Sept. 30, McDonnell Douglas Corp.'s total employee benefit assets increased 17.4% to $7.589 billion from $6.462 billion a year earlier. Defined benefit assets increased 18.2% during the same period, to $5.911 billion from $5 billion. Defined contribution assets increased 14.8%, to $1.678 billion from $1.462 billion.

Key personnel overseeing the investment management of the fund are David Hammerstein, director-retirement funds management; Sheryl L. Kwiatek, manager-retirement funds management; and Anthony J. Mangoff, investment analyst.

Metropolitan Life Insurance

	($ millions)
Total assets*	3,393
Defined benefit	2,446
Defined contribution	947
Thrift or savings	947
Employer DB contributions	0
Benefit payments	39
Employer DC contributions	27

***P&I estimate**

Internally managed assets:	
Total DB	2,446
Total DC	947
Defined benefit asset mix:	
Stocks	25.2%
Fixed income	61.6
Real estate equity	13.2%
Defined contribution asset mix:	
Fixed income	83.5%
Other stock	16.5%

NEW YORK — As of Sept. 30, Metropolitan Life's total employee benefit assets were estimated at $3.393 billion based on the company's figure of $3.022 billion as of Dec. 31, 1988. The defined contribution plan is a thrift plan with a 401(k) option.

All assets are managed internally.

The key person overseeing the plan is Arthur Typermass, treasurer.

State of Michigan Employees' Retirement Systems

	($ millions)
Total assets	17,948
Defined benefit	17,948
Employer DB contributions	870
Benefit payments	975
Internally managed assets:	
Total DB	17,341
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	39.2%
Fixed income	27.2%
Cash equivalents	18.7%
Real estate equity	6.2%
Mortgages	6.1%
Venture capital/LBOs	2.6%

LANSING, Mich. — As of Sept. 30, the State of Michigan Employees' Retirement Systems' total employee benefit assets increased 13.6% to $17.948 billion from $15.798 billion a year earlier. All assets are defined benefit.

Real estate managers: AEW; Copley; Sentinel; Trammell Crow Ventures; Zell/Merrill Lynch.

Venture capital and LBO managers: Accel Partners; Burr, Egan, Deleage; Battery Ventures; Berkshire Partners; Enterprise Management; Frontenac; Great Lakes Capital; Health Care Investment; InterVen Partners; KKR; Marquette; MBW; Menlo Ventures; MLGAL Partners; Morgan Holland Ventures; Newtek Limited Partners; Plant Resources Venture Fund; Regional Financial Enterprises; Robertson, Colman & Stephens; Sunwestern Investment Group; Warburg, Pincus; Wind Point Partners.

Key personnel overseeing the investment management of the fund are Robert A. Bowman, state treasurer, and Barry L. Stevens, director, and Gordon H. Linsday, deputy director, bureau of investments.

City of Milwaukee Employes' Retirement System

	($ millions)
Total assets	1,641
Defined benefit	1,641
Employer DB contributions	17
Benefit payments	55
Defined benefit asset mix:	
Stocks	42%
Fixed income	54%
Cash equivalents	2%
Real estate equity	2%

MILWAUKEE — As of Sept. 30, the

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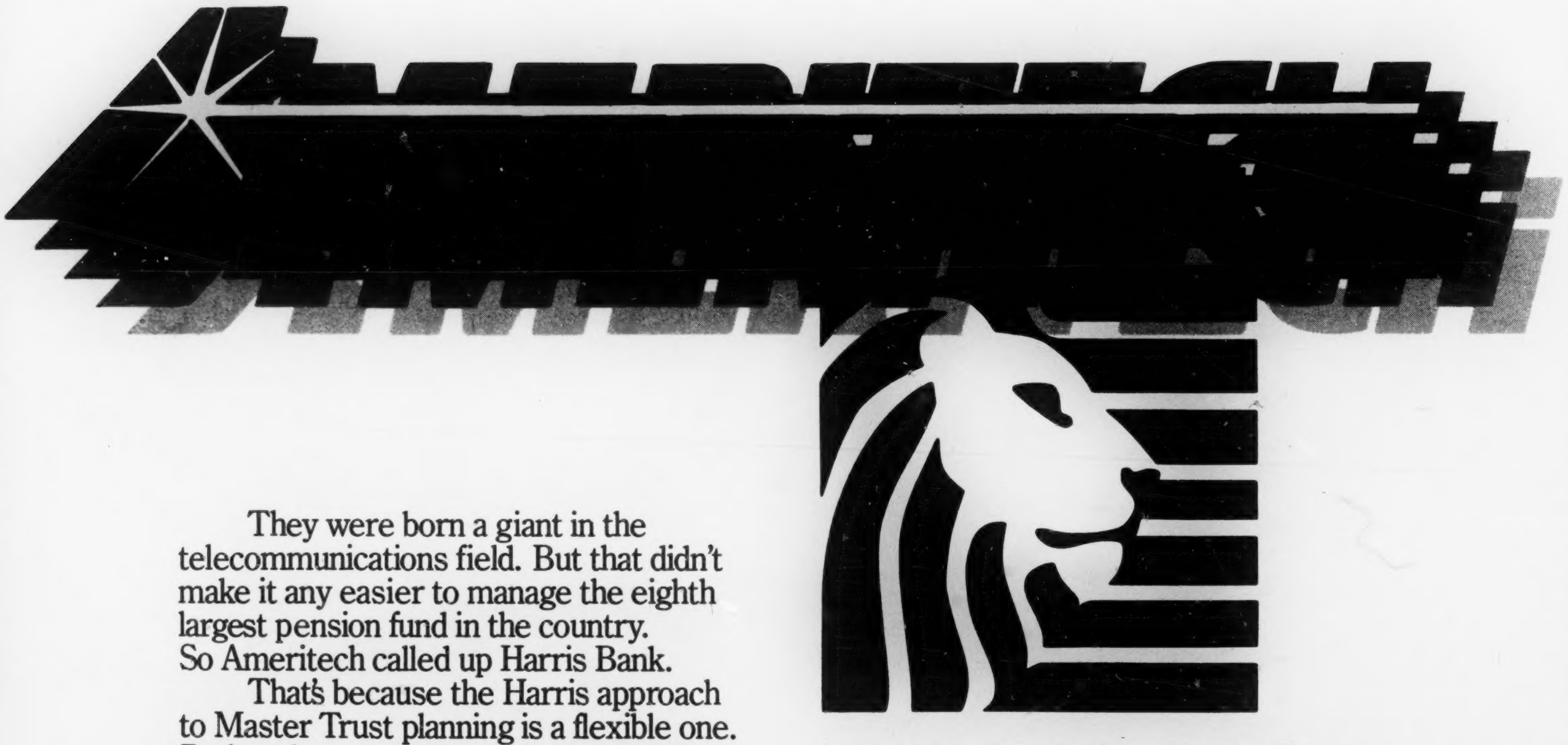

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City of Milwaukee Employes' Retirement System's total employee benefit assets increased 17.5% to $1.641 billion from $1.397 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; Delaware; INVESCO; Northern Trust; and the Wisconsin Investment Board.

Fixed-income managers: Domestic — Criterion; First Wisconsin; Loomis, Sayles; and the Wisconsin Investment Board.

Real estate managers: JMB and Frank Russell.

The master custodian is First Wisconsin Trust; the investment consultant is SEI.

Key personnel overseeing the investment management of the fund are Robert Nehls, executive director, and Patrick Cronin, financial manager.

Minnesota Mining & Manufacturing Co.

	($ millions)
Total assets	3,490
Defined benefit	2,729
Defined contribution	761
401(k)	761
Employer DB contributions	0
Benefit payments	68
Employer DC contributions	26
Internally managed assets:	
Total DB	24
Defined benefit asset mix:	
Stocks	58.4%
Fixed income	31.8%
Real estate equity	6.9%
Other	2.9%
Defined contribution asset mix:	
Company stock	17.6%
Other stock	20.4%
GICs/BICs	55.5%
Other	6.5%

ST. PAUL, Minn. — As of Sept. 30, Minnesota Mining & Manufacturing Co.'s total employee benefit assets increased 29.1% to $3.49 billion from $2.703 billion a year earlier. Defined benefit assets increased 27.2% during the same period, to $2.729 billion from $2.146 billion. Defined contribution assets increased 36.7%, to $761 million from $557 million.

Equity managers: Domestic — Alliance; Ashland; Cursitor-Eaton; Franklin Portfolio; Grantham, Mayo, Van Otterloo; IDS; Mellon; Trinity; TSA; and ValueQuest.

International — Grantham, Mayo, Van Otterloo and Schroder.

Fixed-income managers: Domestic — Hoisington; Minnesota Mutual; PIMCO; and Sun Life.

Real estate managers: Citibank; Equitable; JMB; RCB Realty; RREEF; Schroder; and TCW.

LBO manager: Forstmann Little.

Venture capital managers: Oak Partners and Summitt Ventures.

Other managers: Allen Value Partners; HLM Partners; and Triumph.

The master trustee and global custodian is Boston Safe Deposit; the investment consultants are Lewis Bailey Associates and Harris Trust.

Key personnel overseeing the investment management of the fund are Janet L. Yeomans, director, and Deborah D. Weiss, manager.

Minnesota State Board of Investment

	($ millions)
Total assets	12,343
Defined benefit	11,890
Defined contribution	453
Internally managed assets:	
Total DB	5,123
Total DC	69
Defined benefit asset mix:	
Stocks	40.8%
Fixed income	51%
Cash equivalents	1.4%
Real estate equity	4.3%
Other	2.5%
Defined contribution asset mix:	
Other stock	50.9%
Fixed income	16.1%
Cash equivalents	21.9%
GICs/BICs	11.1%

ST. PAUL, Minn. — As of Sept. 30, Minnesota State Board of Investment's total employee benefit assets increased 20.9% to $12.343 billion from $10.207 billion a year earlier. Defined benefit assets increased 23.1% during the same period, to $11.89 billion from $9.657 billion. Defined contribution assets decreased 21.4% to $453 million from $550 million.

Equity managers: Domestic — Alliance; BMI; Concord Capital; Forstmann Leff; Franklin; IDA; Investment Advisers; Lieber; Rosenberg; Sasco; Waddell & Reed; and Wilshire.

Fixed-income managers: Domestic — Fidelity Management; Investment Advisers; Lehman; Lincoln Capital; Miller, Anderson; Morgan Stanley; and Western Asset.

Real estate managers: Aetna; AEW; Equitable; Heitman; Laventhol and Horwath; Prudential; RREEF; State Street; and TCW.

Venture capital managers: Allied; Brinson Partners; DSV Partners; G and K Partners; Golder, Thoma; Investment Advisers; KKR: Matrix; Northwest Venture Partners; T. Rowe Price; Smith Barney; and Stamps, Woodsum.

Oil and gas managers: Apache; Bank of America; Capital Management; Faegre and Benson; First Reserve; J.P. Morgan; Norwest Bank; and Sterling.

The master custodians are State Street Bank and First Trust St. Paul; the investment consultant is Richards & Tierney.

Key personnel overseeing the investment management of the fund are Howard J. Bicker, executive director; Beth Lehman, assistant executive director; Doug Gorence, manager-equity program; Roger Henry, manager-fixed income program.

The Oct. 1 special report will be a directory of real estate investment managers.

Public Employees' Retirement System of Mississippi

	($ millions)
Total assets	4,129
Defined benefit	4,129
Employer DB contributions	211
Benefit payments	205
Internally managed assets	100
Defined benefit asset mix:	
Stocks	30.7%
Fixed income	58.9%
Cash equivalents	10.4%

JACKSON, Miss. — As of Sept. 30, the Public Employees Retirement System of Mississippi's total employee benefit assets increased 23.8% to $4.129 billion from $3.336 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Bankers Trust; Boston Co.; DFA; GeoCapital; INVESCO; Fayez Sarofim; and Sun Bank.

International — Bankers Trust and Hill Samuel.

Fixed-income managers: Domestic — Criterion; Dreyfus; Lehman Management; PIMCO; and Wells Fargo.

The master custodian is Trustmark National Bank; the global custodian is Boston Safe; SEI is consultant.

Key personnel overseeing the investment management of the fund are Eddie B. Vandiver, deputy director-investments; Ronald D. Logan, investment manager; and Sandra Carvajal, investment technician.

Public School Retirement System of Missouri

	($ millions)
Total assets*	5,328
Defined benefit	5,328
Employer DB contributions	155
Benefit payments	158

**as of June 30, 1989*

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Defined benefit asset mix:	
Stocks	16%
Fixed income	56%
Cash equivalents	13%
Mortgage-backed securities	15%

JEFFERSON CITY, Mo. — As of June 30, the Public School Retirement System of Missouri's total employee benefit assets increased 18.4% to $5.328 billion from $4.5 billion nine months earlier. All assets are defined benefit.

Balanced managers: Boatmen's National; Loomis, Sayles; and United Missouri Investment.

The master custodian is Boatmen's National; Bank; the investment consultant is DeMarche Associates.

The key person overseeing the investment management of the fund's assets is David W. Mustoe, executive secretary.

Mobil Oil Corp.

	($ millions)
Total assets*	4,560
Defined benefit	2,425
Defined contribution	2,135
Other	2,135
Employer DB contributions	95
Benefit payments	170
Employer DC contributions	49
**as of Aug. 31, 1989*	

Hedging devices used:	
Bond options	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	50%
Fixed income	36%
Cash equivalents	7%
Insurance	7%
Defined contribution asset mix:	
Company stock	49%
Other stock	6%
Fixed income	4%
Cash equivalents	8%
GICs/BICs	33%

NEW YORK — As of Aug. 31, Mobil Oil Corp.'s total employee benefit assets increased 17.5% to $4.56 billion from $3.88 billion 11 months earlier. Defined benefit assets increased 17.1% during the same period, to $2.425 billion from $2.07 billion. Defined contributions assets, which are in a thrift or savings/401(k) plan, increased 18%, to $2.135 billion from $1.81 billion.

Equity managers: Domestic — Alliance; Capital Guardian; Jennison; Miller, Anderson & Sherrerd; Fayez Sarofim; and Wells Fargo.

International — Capital Guardian.

Fixed-income managers: Domestic — Criterion; Henry Kaufman; Loomis, Sayles; Miller, Anderson & Sherrerd; J.P. Morgan; PIMCO; and State Street Research.

Cash managers: U.S. Trust Co. of New York (defined benefit) and Bankers Trust (defined contribution).

GIC and insurance manager: Metropolitan Life.

The master trustee for the defined benefit plan is U.S. Trust/New York, and for the defined contribution plan, Bankers Trust.

The key person overseeing the investment management of the fund is R.B. Hahnen, manager of corporate benefits-finance.

Monsanto Co.

	($ millions)
Total assets	4,300
Defined benefit	3,200
Defined contribution	1,100
Other	1,100
Employer DB contributions	0
Benefit payments	200
Employer DC contributions	34

Internally managed assets:	
Total DB	70
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	62%
Fixed income	21%
Cash equivalents	8%
Real estate equity	9%
Defined contribution asset mix:	
Company stock	40%
Other stock	7%
GICs/BICs	50%
Participant loans	3%

ST. LOUIS — As of Sept. 30, Monsanto Co.'s total employee benefit assets increased 7.8% to $4.3 billion from $3.99 billion a year earlier. Defined benefit assets increased 1.6% during the same period, to $3.2 billion from $3.15 billion. Defined contribution assets increased 31% to $1.1 billion from $840 million.

Equity managers: Domestic — Brown Capital; Delaware; Hagler, Mastrovita & Hewitt; Hotchkis and Wiley; Jennison; Lincoln Capital; Lord, Abbett; Morgan Grenfell; T. Rowe Price; Primecap; RCM; State Street Research; and Trinity.

International — Capital Guardian; Martin Currie; Rowe Price-Fleming.

Fixed-income managers: Domestic — Boatmen's National; W.R. Huff; Fischer, Francis, Trees & Watts; J.P. Morgan; Standish, Ayer & Wood; STW; and TCW.

Real estate managers: Equitable; Landauer; LaSalle; RREEF; and TCW.

Other managers: Analytic; Chancellor; and Security Pacific.

The master trustee and the global custodian is Northern Trust; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are A.E. Wolfarth, assistant treasurer, and W.H. Crabbin, pension analyst.

Motorola Inc.

	($ millions)
Total assets	2,017
Defined benefit	566
Defined contribution	1,451
Other	1,451
Employer DB contributions	0
Benefit payments	9
Employer DC contributions	35

Defined benefit asset mix:	
Stocks	64%
Fixed income	36%
Defined contribution asset mix:	
Company stock	8%
Other stock	40%
Fixed income	52%

SCHAUMBURG, Ill. — As of Sept. 30, Motorola Inc.'s total employee benefit assets increased 24.7% to $2.017 billion from $1.618 billion a year earlier. Defined benefit assets increased 19.9% to $566 million from $472 million. Defined contribution assets increased 26.6% to $1.451 billion from $1.146 billion.

Equity managers: Domestic — Capital Guardian; Delaware; Harris Trust; Jennison; Lehman; Lincoln Capital; and Northern Trust.

International — Morgan Grenfell and Brinson Partners.

Fixed-income managers: Domestic — Brown Brothers Harriman; Scudder, Stevens; and Stein Roe.

The master trustees and global custodians are Harris Trust for the defined benefit plan and Northern Trust for the defined contribution plan.

William H.S. Preece Jr., assistant treasurer-investments, oversees the investment management of the fund.

N

National Electrical Contractors Association/International Brotherhood of Electrical Workers

	($ millions)
Total assets	3,675
Defined benefit	3,490
Defined contribution	185
Other	185
Employer DB contributions	170
Benefit payments	140
Employer DC contributions	24

Defined benefit asset mix:	
Stocks	36%
Fixed income	50%
Cash equivalents	6%
Real estate equity	8%
Defined contribution asset mix:	
Other stock	23%
Fixed income	45%
Cash equivalents	18%
Other	14%

WASHINGTON — As of Sept. 30, the National Electrical Contractors Association/International Brotherhood of Electrical Workers' total employee benefit assets increased 20.7% to $3.675 billion from $3.045 billion a year earlier. Defined benefit assets increased 20.1% during the same period, to $3.49 billion from $2.906 billion. Assets in its defined contribution plan increased 33.1%, to $185 million from $139 million.

The master trustee is Boston Safe Deposit; the investment consultant is Marco Consulting Croup.

Key personnel overseeing the investment management of the fund are John Grau and Jack Moore, trustees; and Roy Dickinson, executive assistant.

National Rural Electric Cooperative Association

	($ millions)
Total assets	2,304
Defined benefit	1,824
Defined contribution	480
401(k)	480

Internally managed assets:	
Total DB	882
Defined benefit asset mix:	
Stocks	53%
Fixed income	31%
Cash equivalents	16%
Defined contribution asset mix:	
Company stock	26%
Cash equivalents	27%
GICs/BICs	47%

WASHINGTON — As of Sept. 30, the National Rural Electric Cooperative Association's total employee benefit assets increased 16.2% to $2.304 billion from $1.982 billion a year earlier. Defined benefit assets increased 15% during the same period, to $1.824 billion from $1.586 billion. Defined contribution assets increased 21.2%, to $480 million from $396 million.

Equity managers: Domestic — Bankers Trust; Barrow, Hanley, Mewhinney & Strauss; C-S Capital; Capital Guardian; and Chesapeake.

International — Grantham, Mayo, Van Otterloo and J.P. Morgan.

Fixed-income manager: Domestic — Lincoln Income.

The master trustee and global custodian is State Street Bank and Trust.

Key personnel overseeing the investment management of the fund are Peter R. Morris, executive director-investments; Stuart E. Teach, senior equity portfolio manager; and Douglas G. Kern, senior fixed-income portfolio manager.

Navistar International Transportation Corp.

	($ millions)
Total assets	2,058
Defined benefit	2,031
Defined contribution	27
401(k)	27
Employer DB contributions	249
Benefit payments	234
Employer DC contributions	0.03

Internally managed assets:	
Total DB	176
Total DC	3
Hedging devices used:	
Fixed-income futures	
Defined benefit asset mix:	
Fixed income	81.9%
Cash equivalents	3.7%
GICs/BICs	0.3%
Annuities	2.1%
Mortgage-backed securities	12%
Defined contribution asset mix:	
Company stock	11%
Other stock	27%
GICs/BICs	62%

CHICAGO — As of Sept. 30, Navistar International Transportation Corp.'s total employee benefit assets increased 15.3% to $2.058 billion from $1.785 billion a year earlier. Defined benefit assets increased 14.6% during the same period, to $2.031 billion from $1.772 billion. Defined contribution assets increased 107.7% to $27 million from $13 million.

Equity managers: Domestic — Gabelli Asset Fund and Priform Investment.

Fixed-income manager: Domestic — Jennison.

The master trustee for the defined benefit plans was, as of Sept. 30, Bankers Trust; effective Nov. 1, it is Northern Trust. Continental Bank is trustee of the defined contribution plan.

Key personnel overseeing the investment management of the fund are T.M. Endsley, director-cash and investments, and E. Willis, pension analyst.

Public Employees Retirement System of Nevada

	($ millions)
Total assets	3,236
Defined benefit	3,236
Employer DB contributions	220
Benefit payments	108

Hedging devices used:	
Stock options	
Bond options	
Defined benefit asset mix:	
Stocks	43.4%
Fixed income	47.5%
Cash equivalents	0.6%
Real estate equity	6.2%
Mortgages	2.3%

CARSON CITY, Nev. — As of Sept. 30, the Public Employees Retirement System of Nevada's total employee benefit assets increased 20.7% to $3.236 billion from $2.682 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Alliance; DFA; INVESCO; Loomis, Sayles; Wellington; and Wells Fargo.

International — Axe Core.

Fixed-income managers: Domestic — Criterion; Patterson Capital; Putnam; and State Street Research.

Real estate managers: Heitman; JMB; Karsten Realty; Lehndorff & Babson; J.P. Morgan; PMRealty; Prudential; and TCW.

Other managers: Balch, Hardy & Scheinmann; Bankers Trust; Columbine; Criterion; Golder, Thoma, Cressey; Menlo; and Summit Ventures.

The master custodian is Security Pacific National Bank; the investment consultant is William M. Mercer Meidinger Hansen.

Key personnel overseeing the investment management of the fund are Laura Wallace, investment officer, and Peggy Clark, investment analyst.

New Jersey Division of Investment

	($ millions)
Total assets	24,526

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Defined benefit	24,278
Defined contribution	248
Thrift or savings	248
Employer DB contributions	830
Benefit payments	420
Internally managed assets:	
Total DB	24,278
Total DC	248
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	48.7%
Fixed income	34.1%
Cash equivalents	4.1%
Mortgage-backed securities	13.1%
Defined contribution asset mix:	
Other stock	100%

TRENTON, N.J. — As of Sept. 30, the New Jersey Division of Investment's total employee benefit assets increased 22.1% to $24.526 billion from $20.092 billion a year earlier. Defined benefit assets increased 22% during the same period, to $24.278 billion from $19.892 billion. Defined contribution plan assets increased 24%, to $248 million from $200 million.

All assets are managed internally.

A group of 12 banks serves as custodian.

Key personnel overseeing the investment management of the fund are Roland M. Machold, director; Anthony Arcuni, deputy director; and Stephen Kornrumpf, assistant director.

New Mexico Educational Retirement Board

	($ millions)
Total assets	1,890
Defined benefit	1,890
Employer DB contributions	74
Benefit payments	122
Internally managed assets	1,890
Defined benefit asset mix:	
Stocks	5.6%
Fixed income	87.2%
Cash equivalents	7.2%

SANTA FE, N.M. — As of Sept. 30, the New Mexico Educational Retirement Board's total employee benefit assets increased 8% to $1.89 billion from $1.75 billion a year earlier. All assets are defined benefit.

All assets are managed internally, with Wellington Management serving as an adviser on stock and bond investments.

The master custodian is Bank of New York.

Key personnel overseeing the investment management of the fund are John E. Young, chief investment officer, and Sharon L. Scrogham, investment officer.

New Mexico Public Employees' Retirement Association

	($ millions)
Total assets	1,800
Defined benefit	1,800
Employer DB contributions	92
Benefit payments	84
Internally managed assets	6
Defined benefit asset mix:	
Stocks	37%
Fixed income	56%
Cash equivalents	6%
Mortgages	1%

SANTA FE, N.M. — As of Sept. 30, the New Mexico Public Employees' Retirement Association's total employee benefit assets increased 19% to $1.8 billion from $1.513 billion a year earlier. All assets are in defined benefit plans.

Equity managers: Domestic — Bankers Trust and Merus Capital.

Fixed-income managers: Domestic — Brown Brothers Harriman and Wentworth Hauser & Violich.

The custodian is Bank of New York; the investment consultant is Wilshire.

Richard Miller, chief operating officer, oversees the investment management of the fund.

New York City Retirement Systems

	($ millions)
Total assets	45,422
Defined benefit	45,422
Employer DB contributions	1,800
Benefit payments	3,400
Internally managed assets	1,675
Defined benefit asset mix:	
Stocks	36%
Fixed income	61%
Cash equivalents	3%

NEW YORK — As of Sept. 30, New York City Retirement Systems' total employee benefit assets increased 27.8% to $45.422 billion from $35.537 billion a year earlier.

The New York City comptroller's office oversees all investments for the New York City Employees', the Fire Department and the Police Department Retirement systems and oversees fixed-income investments for the Teachers' and the Board of Education systems. The Teachers' system oversees its GIC and equity investments and the equity investments of the Board of Education system.

All data in this profile other than the total asset figure, reflect the assets overseen by the comptroller's office.

Equity managers: Domestic — Bankers Trust; Bear Stearns; Fidelity; Investment Advisers; Lazard Freres; Oppenheimer; J & W Seligman; and TCW.

Fixed-income managers: Domestic — Bankers Trust; BEA; Bear Stearns; Chase Investors; Fiduciary Trust; Fischer, Francis, Trees & Watts; Investment Advisers; Kennedy Associates; Lehman Management; Lincoln Capital; Mellon Bond Associates; Miller, Anderson & Sherrerd; Mitchell Hutchins; PIMCO; T. Rowe Price; Putnam; Smith Barney; State Street Bank; RCM; Weiss, Peck & Greer; and Wells Fargo.

The master trustee is Citibank; the investment consultants are Callan; SEI; EAI; Rogers, Casey; and Buck.

Key personnel overseeing the investment management of the systems handled by the comptroller's office are Beverly L. Hamilton, third deputy comptroller; William Paolino, chief-bureau of asset management; and Candace Cox, division chief-investment strategy division.

New York Life Insurance Co.

	($ millions)
Total assets*	1,749
Defined benefit	1,525
Defined contribution	224
Employer DB contributions	0
Benefit payments	47
Employer DC contributions	10
Internally managed assets:	
Total DB	907
Total DC	224
Defined benefit asset mix:	
Stocks	21.9%
Fixed income	76%
Real estate equity	2.1%
Defined contribution asset mix:	
Other stock	16.3%
Fixed income	64.7%
GICs/BICs	14%
Other	5%

**P&I estimate*

NEW YORK — *Pensions & Investments* estimates New York Life Insurance Co.'s employee benefit assets totaled $1.749 billion as of Sept. 30, of which $1.525 billion was defined benefit and $224 million was defined contribution. The estimates are based on data provided by the company as of Dec. 31, 1988.

Equity managers: Domestic — MacKay-Shields and Monitor Capital.

International — Gamma Advisers.

Fixed-income managers: Domestic — MacKay-Shields and Monitor Capital.

International — Gamma Advisers.

Real estate manager: Greystone.

Key personnel overseeing the investment management of the fund are Richard M. Kernan Jr., senior vice president; Lester L. Schoenberg, se-

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nior vice president; and George J. Trapp, vice president.

New York State & Local Retirement Systems

	($ millions)
Total assets	44,238
Defined benefit	44,238
Employer DB contributions	795
Benefit payments	1,628
Internally managed assets	36,919
Defined benefit asset mix:	
Stocks	49.4%
Fixed income	37.7%
Cash equivalents	3.7%
Real estate equity	1.8%
Mortgages	5.9%
Other	1.5%

ALBANY, N.Y. — As of Sept. 30, the New York State & Local Retirement Systems's total employee benefit assets increased 16.7% to $44.238 billion from $37.918 billion assets a year earlier. All assets are defined benefit.

Stock/bond managers: Alliance; Capital Guardian; Delaware; Lazard Freres; Lord, Abbett; Miller, Anderson & Sherrerd; Oppenheimer; J & W Seligman; Shearson; and Wells Fargo.

Real estate managers: CIGNA; Copley; Corporate Property Investors; Goldman, Sachs; JMB; LaSalle; O'Connor; RREEF; Schroder; and TCW.

LBO managers: Adler & Shaykin; Equitable; Forstmann Little; Freeman & Spogli; Gray Klein; and KKR.

Venture capital managers: Bridge Capital; Corporate Ventures; Crossroads; Montgomery Bridge; Alan Patricof; Peregrine Ventures; Rothschild Ventures; and U.S. Venture Partners.

The master trustee and global custodian is Chase Manhattan; the investment consultant is Callan.

Key personnel overseeing the investment management of the fund are John Hull, deputy comptroller, and John O'Connor and Robert Steves, assistant deputies.

New York State Teachers' Retirement System

	($ millions)
Total assets	28,130
Defined benefit	28,130
Employer DB contributions	926
Benefit payments	850
Internally managed assets	25,374
Defined benefit asset mix:	
Stocks	56.5%
Fixed income	33.1%
Cash equivalents	2.6%
Real estate equity	1.3%
Mortgages	6.1%
Other	0.4%

ALBANY, N.Y. — As of Sept. 30, the New York State Teachers' Retirement System's total employee benefit assets increased 23.5% to $28.13 billion from $22.779 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Sanford C. Bernstein; Beutel, Goodman; Cowen; GAMCO; Glickenhaus; Lehman Management; Morgan Grenfell; Peregrine Capital; and RCM.

Fixed-income manager: Domestic — Sanford C. Bernstein.

Real estate managers: Aetna; Equitable; Goldman, Sachs; and Prudential.

The master custodian is Bankers Trust; the investment consultant is Buck.

Key personnel overseeing the investment management of the fund are Harold N. Langlitz, executive director; Edward J. Reno Jr., securities investment officer; and George M. Philip, chief real estate investment officer.

The consultants directory will be published Nov. 12.

North Carolina Department of State Treasurer

	($ millions)
Total assets	16,791
Defined benefit	16,791
Employer DB contributions*	438
Benefit payments*	465

**as of Dec. 31, 1988*

Internally managed assets	10,764
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	25%
Fixed income	61.6%
Cash equivalents	0.1%
Real estate equity	1.3%
Ginnie Maes	12%

RALEIGH, N.C. — As of Sept. 30, total employee benefit assets of the North Carolina Department of the State Treasurer, which oversees the North Carolina Retirement Systems, increased 21.7% to $16.791 billion from $13.8 billion a year earlier. All assets are in defined benefit plans.

Equity managers: Domestic — Alliance; Branch Bank; Central Carolina Bank; First Citizens Bank; First Union National; First Wachovia; NCNB; and Wellington Management.

International — Wellington.

Real estate managers: Aetna; CIGNA; First Wachovia; Goldman, Sachs; J.P. Morgan; NCNB; and Sentinel.

The master custodian is Bank of New York.

Key personnel overseeing the investment management of the fund are Harlan E. Boyles, state treasurer; C. Douglas Chappell, deputy treasurer and director-investment and banking division; and P. Keith Leonard, assistant state investment officer.

Northrop Corp.

	($ millions)
Total assets	3,623
Defined benefit	2,816
Defined contribution	807
Thrift or savings	28
401(k)	779
Employer DB contributions	0
Benefit payments	75
Employer DC contributions	38
Defined benefit asset mix:	
Stocks	69%
Fixed income	23%
Cash equivalents	8%
Defined contribution asset mix:	
Company stock	23%
Other stock	44%
Fixed income	10%
Cash equivalents	23%

LOS ANGELES — As of Sept. 30, Northrop Corp.'s total employee benefit assets increased 21.6% to $3.623 billion from $2.979 billion a year earlier. Defined benefit assets increased 25.5% during the same period, to $2.816 billion from $2.243 billion. Defined contribution assets increased 9.6%, to $807 million from $736 million.

Equity managers: Domestic — Capital Guardian; Forstmann-Leff; Jennison; Putnam; RCM; State Street Research; and TCW.

Fixed-income managers: Domestic — Fisher, Francis, Trees & Watts and Jennison.

The master trustee is Bankers Trust.

The key person overseeing the investment management of the fund is Richard B. Lohrer, vice president-trust investments.

NYNEX Corp.

	($ millions)
Total assets	16,062
Defined benefit	13,262
Defined contribution	2,800
Thrift or savings plan	2,800
Employer DB contributions	0
Benefit payments	392
Employer DC contributions	80
Internally managed assets:	
Total DB	1,412
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	60.4%
Fixed income	32.3%
Real estate equity	7.3%
Defined contribution asset mix:	
Company stock	32%
Other stock	15%

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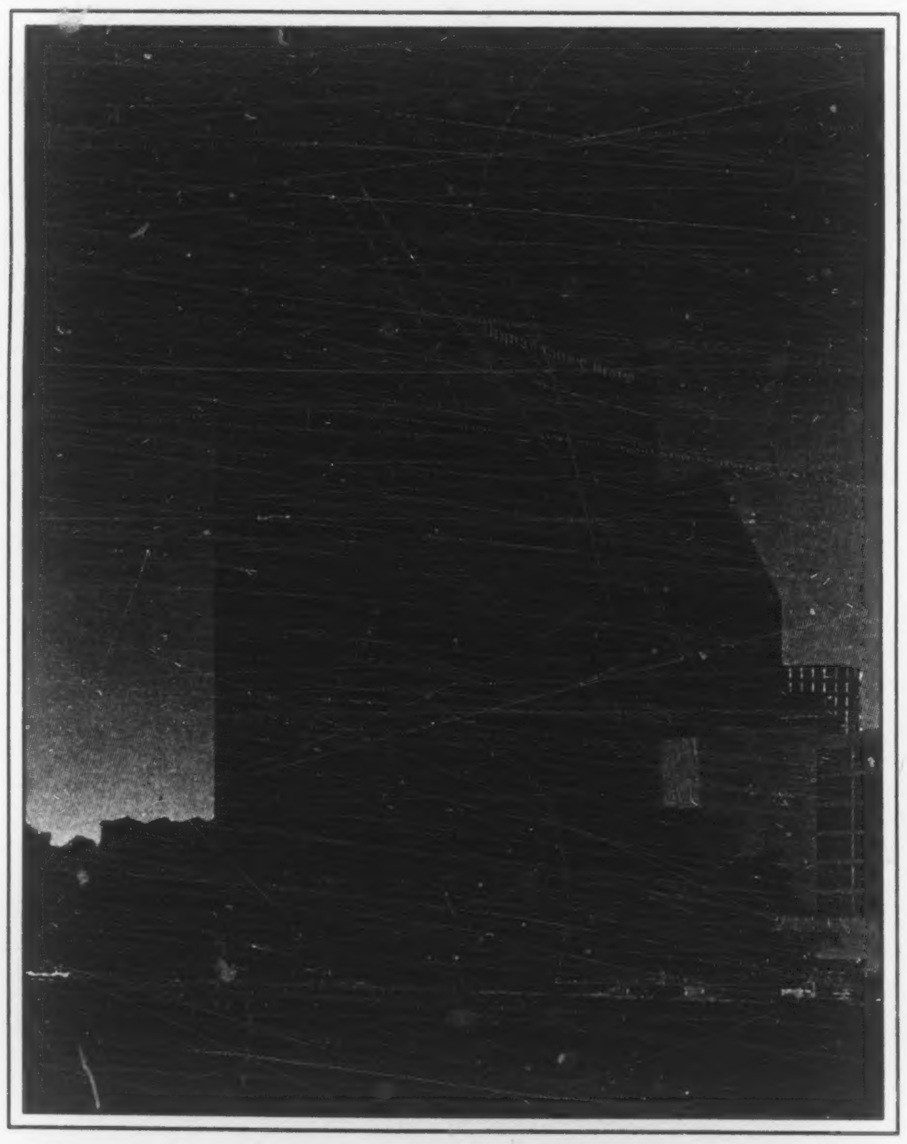

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Fixed income	10%
Cash equivalents	2%
GICs/BICs	26%
Other	15%

NEW YORK — As of Sept. 30, NYNEX Corp.'s total employee benefit assets increased 19.9% to $16.062 billion from $13.401 billion a year earlier. Defined benefit assets increased 17.8% during the same period, to $13.262 billion from $11.262 billion. Defined contribution assets rose 30.9%, to $2.8 billion from $2.139 billion.

Equity managers: Domestic — ANB Investment; Barrow, Hanley, Mewhinney & Strauss; Batterymarch; Daniel Breen; DFA; Fidelity Management; Franklin Portfolio; McCowan; Mitchell Hutchins; Trinity; TCW; and Wells Fargo.

International — ANB Investment; Capital Guardian; DFA; Mellon-Pictet; Morgan Stanley; State Street Bank; and Wells Fargo.

Fixed-income managers: Domestic — Boston Co.; Brown Brothers Harriman; Hancock; Jennison; Lincoln Capital; Massachusetts Financial; Mellon Bond Associates; Miller, Anderson & Sherrerd; Mitchell Hutchins; Prudential Capital; Standish Ayer & Wood; State Street Research; and Western Asset.

Real estate managers: AEW; Heitman; and McMahan.

The master trustees are Mellon Bank and Bankers Trust; the global custodian is Mellon Bank.

Key personnel overseeing the investment management of the fund are J.E. Clines, director; R. Wolf and J. Sutka, investment directors.

O

The Police and Firemen's Disability and Pension Fund of Ohio

	($ millions)
Total assets	3,070
Defined benefit	3,070
Employer DB contributions	150
Benefit payments	231
Internally managed assets	1,839
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	33.6%
Fixed income	54.8%
Cash equivalents	5.1%
Real estate equity	5.7%
Mortgages	0.4%
Venture capital	0.4%

COLUMBUS, Ohio — As of Sept. 30, The Police and Firemen's Disability and Pension Fund of Ohio's total employee benefit assets increased 17.4% to $3.07 billion from $2.614 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Atalanta/Sosnoff; Axe Core; Bankers Trust; Duff & Phelps; Loomis, Sayles; Oppenheimer; Society Bank; and Value Line.

Real estate managers: Copley; MIG; Schroder; TA Associates; and Trident/Meyer.

Venture capital managers: Cardinal Financial and Primus.

The custodian is the state treasurer; the real estate investment consultant is Townsend.

Key personnel overseeing the investment management of the fund are Theodore G. Hall, investment manager, and Christopher Woods, fixed-income portfolio manager.

Ohio Public Employees' Retirement System

	($ millions)
Total assets	19,305
Defined benefit	19,305
Employer DB contributions	769
Benefit payments	933
Internally managed assets	18,659
Defined benefit asset mix:	
Stocks	21.1%
Fixed income	57.2%
Cash equivalents	18.2%
Real estate equity	3.4%
Venture capital	0.1%

COLUMBUS, Ohio — As of Sept. 30, the Ohio Public Employees' Retirement System's total employee benefit assets increased 17.7% to $19.305 billion from $16.408 billion a year earlier. All assets are defined benefit and, except for real estate, are managed internally.

Real estate managers: Bristol Group; CIGNA; Lowe Enterprises; NCNB; Rothschild; and Wells Fargo.

The custodian is the state treasurer.

Robert A. McLaughlin, investment officer, oversees the investment management of the fund.

School Employees Retirement System of Ohio

	($ millions)
Total assets	2,817
Defined benefit	2,817
Employer DB contributions	160
Benefit payments	238
Internally managed assets	1,770
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	39%
Fixed income	18.9%
Cash equivalents	6.9%
Real estate equity	10.7%
Mortgages	1.6%
Mortgage-backed securities	21.1%
Venture capital	1%
Convertible securities	0.8%

COLUMBUS, Ohio — As of Sept. 30, the School Employees Retirement System of Ohio's total employee benefit assets increased 16.5% to $2.817 billion from $2.418 billion a year earlier. All assets are defined benefit.

Equity manager: Domestic — Mellon Capital.

Real estate managers: Equitable; NCNB; and Prudential.

Venture capital managers: Cardinal Capital; Morganthaler; and Primus.

The custodian is the state treasurer; the investment consultants are Institutional Property Consultants and Ronald A. Karp.

Key personnel overseeing the investment management of the fund are Paul Kubinsky, director of investments, and Robert Cowman, assistant director of investment.

State Teachers Retirement System of Ohio

	($ millions)
Total assets	18,059
Defined benefit	18,059
Employer DB contributions	653
Benefit payments	926
Internally managed assets	17,650
Hedging devices used:	
Stock options	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	30%
Fixed income	40.3%
Cash equivalents	12%
Real estate equity	11.3%
Mortgages	6.3%
Venture capital	0.1%

COLUMBUS, Ohio — As of Sept. 30, the State Teachers Retirement System of Ohio's total employee benefit assets increased 17.7%, to $18.059 billion from $15.348 billion a year earlier. All assets are defined benefit and internally managed, except for 20% — $409 million — of the $2.034 billion real estate allocation. The outside real estate managers are involved in specialized areas, such as timberland, and do not have full discretion.

Real estate managers: Copley; F.I.A.; Hancock Timber Resource; LaSalle; Travelers Realty; and Wellington Real Estate.

Investment consultants are Wellington Management and Karsten Realty.

Key personnel overseeing the investment management of the fund are C. James Grothaus, executive director; Stephen A. Mitchell, deputy executive director-investments; and Daniel M. Szente, assistant director-investments.

Book of Lists: Dec. 24.

Oklahoma Teachers' Retirement System

	($ millions)
Total assets	1,968
Defined benefit	1,861
Defined contribution	125
Other	125
Employer DB contributions	129
Benefit payments	251
Internally managed assets:	
Total DB	144
Defined benefit asset mix:	
Stocks	25%
Fixed income	68%
Cash equivalents	7%

OKLAHOMA CITY — As of Sept. 30, the Oklahoma Teachers' Retirement System's total employee benefit assets increased 9.3% to $1.968 billion from $1.8 billion a year earlier. Defined benefit assets increased 9.5% to $1.861 billion from $1.7 billion during the same period. Defined contribution assets rose 25% to $125 million from $100 million.

Equity managers: Domestic — Bank of Oklahoma; Capital Advisors; First Investment Management; Tom Johnson; Lazard Freres; and Liberty National Bank.

Fixed-income managers: Domestic — Bank of Oklahoma; First Investment Management; Tom Johnson; Liberty National; and Siebel.

The master custodian is First Interstate Bank.

Key personnel overseeing the investment management of the fund are Tom Beavers, executive secretary; Randy Kopsa, secretary/treasurer; and Jo Witt, director of investments.

Central Pension Fund of the International Union of Operating Engineers and Participating Employers

	($ millions)
Total assets	2,159
Defined benefit	2,159
Employer DB contributions	102
Benefit payments	81
Defined benefit asset mix:	
Stocks	32.4%
Fixed income	39.3%
Cash equivalents	15.3%
Real estate equity	1.6%
Mortgages	9.1%
GICs/BICs	2.3%

WASHINGTON — As of Sept. 30, the Central Pension Fund of the International Union of Operating Engineers and Participating Employers' total employee benefit assets increased 17.8% to $2.159 billion from $1.832 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Sanford Bernstein; Concord Capital; GAMCO; Husic; Shearson Asset; Southeastern; and Wells Fargo.

Fixed-income managers: Domestic — Duff & Phelps; Loomis Sayles; STW; Wells Fargo; and Western.

Real estate manager: AEW.

The master trustee is State Street Bank; the investment consultant is Ennis, Knupp & Associates.

Key personnel overseeing the investment management of the fund are Jack E. Johnson, director of finance, and Robert A. Birch, assistant to the director of finance.

Oregon Public Employes Retirement System

	($ millions)
Total assets	11,178
Defined benefit	11,178
Employer DB contributions	480
Benefit payments	304
Internally managed assets	3,505
Hedging devices used:	
Stock options	
Stock index futures	
Defined benefit asset mix:	
Stocks	59.4%
Fixed income	23.3%
Cash equivalents	1%
Real estate equity	4.4%
Mortgages	4.8%
Other	7.1%

SALEM, Ore. — As of Sept. 30, the Oregon Public Employes Retirement System's total employee benefit assets increased 27% to $11.178 billion from $8.8 billion a year ago. All assets are defined benefit.

Equity managers: Domestic — Batterymarch; BEA; Columbia Management; Cutler; Franklin Asset; Froley, Revy; General American Investors; Harris Associates; Hotchkis and Wiley; Pinnacle Associates; Quest Advisory; RCM; Fayez Sarofim; George Springman; and Thompson-Rubenstein.

International — Cursitor-Eaton; Daiwa; Globe-Finlay; Matuschka-Moser; Nomura Capital; Phillipe Advisory; Rowe Price-Fleming.

Real estate manager: Alex Brown.

LBO manager: KKR.

The master custodian is First Interstate Bank; the global custodian is Chase; the investment consultants are Frank Russell and Wilshire.

Key personnel overseeing the investment management of the fund are Jim George, investment manager; Bill Unvertzagt, senior investment officer-fixed income; Jim Yasutome, senior investment officer-short-term investments; Terry Canby, senior investment officer-real estate and mortgages; and Jay Fewel, equity investment officer.

Owens-Illinois Inc.

	($ millions)
Total assets	2,644
Defined benefit	2,346
Defined contribution	298
401(k)	298
Employer DB contributions	7
Benefit payments	148
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	71.6%
Fixed income	12.5%
Cash equivalents	6.4%
Real estate equity	6.2%
Mortgages	2.4%
GICs/BICs	0.9%

TOLEDO, Ohio — As of Sept. 30, Owens-Illinois Inc.'s total employee benefit assets increased 15.7% to $2.644 billion from $2.286 billion a year earlier. Defined benefit assets increased 18.2% during the same period, to $2.346 billion from $1.985 billion. Defined contribution assets decreased 1%, to $298 million from $301 million.

Equity managers: Domestic — Barrow, Hanley, Mewhinney & Strauss; DFA; Emerging Growth; Franklin Portfolio; Harbor Capital; Jennison; Lazard Freres; Lieber; and Lincoln Capital.

International — Grantham, Mayo, Van Otterloo; Marsh & Cunningham; and Morgan Grenfell.

Fixed-income managers: Domestic — Jennison; Lazard Freres; PIMCO; State Street Bank; and Trustcorp.

International — Julius Baer.

Real estate managers: AEW; American Agricultural; Boston Co.; Prudential; RPI; RREEF; and Security Capital.

The master trustee is First Wachovia; the global custodian is Chase London; the investment consultant is Richards & Tierney.

Key personnel overseeing the investment management of the fund are Lee A. Wesselmann, senior vice president and chief financial officer; Ronald C. Boller, corporate vice president and director-benefit finance; and Constance L. Souders, manager-employee benefit plan asset administration.

P

Pacific Gas & Electric Co.

	($ millions)
Total assets	4,259
Defined benefit	3,056
Defined contribution	1,203
401(k)	1,203
Employer DB contributions	122
Benefit payments	121
Employer DC contributions	28
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	71%
Fixed income	14%
Cash equivalents	5%
Real estate equity	10%
Defined contribution asset mix:	
Company stock	90%
Other stock	7%
GICs/BICs	2%
Money market	1%

SAN FRANCISCO — As of Sept. 30, Pacific Gas & Electric Co.'s total employee benefit assets increased 29.1% to $4.259 billion from $3.299 billion as of June 30, 1988. Defined benefit assets increased 25.3% during the same period, to $3.056 billion from $2.439 billion. Defined contribution assets increased 39.9%, to $1.203 billion from $860 million.

Equity managers: Domestic — Bankers Trust; Barrow, Hanley, Mewhinney & Strauss; Dodge & Cox; Geewax Terker; Jundt/Capen; Loomis, Sayles; McCowan; Metropolitan Life; Miller, Anderson & Sherrerd; Olympic Capital; RCM; and Wells Fargo.

International — Arnhold & S. Bleichroeder; Capital Guardian; Oechsle; Posthorn; and Wells Fargo.

Fixed-income managers: Domestic — Sanford C. Bernstein; Fischer, Francis Trees & Watts; Metropolitan Life; Miller Anderson & Sherrerd; Prudential; and Wells Fargo.

Real estate managers: Corporate Property Investors; JMB; LaSalle; Metropolitan Life; Prudential; RREEF; and TCW.

The master trustee and global custodian is State Street Bank; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Gordon R. Smith, vice president-finance and rates; Jack F. Jenkins-Stork, treasurer; and Sunny Oberoi, director-investments and benefit finance.

Pacific Telesis Group

	($ millions)
Total assets*	11,443
Defined benefit	9,674
Defined contribution	1,769

**From Money Market Directory*

SAN FRANCISCO — According to the Money Market Directory, Pacific Telesis Group's employee benefit assets totaled $11.443 billion as of June 30. Defined benefit assets totaled $9.674 billion and defined contribution assets, $1.769 billion.

Richard McGahan, director-pension fund, oversees the investment management of the fund.

Pan American World Airways Inc.

	($ millions)
Total assets	1,621
Defined benefit	665
Defined contribution	956
Thrift or savings	908
ESOP	6
Other	42
Employer DB contributions	149
Benefit payments	107
Employer DC contributions	49
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	12%
Fixed income	45%
Cash equivalents	1%
Annuities	21%
Other	21%
Defined contribution asset mix:	
Other stock	61%
Fixed income	11%
Cash equivalents	28%

NEW YORK — As of Sept. 30, Pan American World Airways Inc.'s total employee benefit assets increased 30.7% to $1.621 billion from $1.24 billion a year earlier. Defined benefit assets increased 23.1% during the same period, to $665 million from $540 million. Assets in its defined contribution plan increased 36.6% to $956 million from $700 million.

Equity managers: Domestic — Ardsley Partners; Bankers Trust; Delaware; GAMCO; Lord, Abbett; Nicholas-

Applegate; Putnam; and Reich & Tang.

International — Alliance; Brinson Partners; Putnam; and WorldInvest.

Fixed-income managers: Domestic — Bankers Trust, Brinson Partners; Fisher, Francis, Trees & Watts; Mellon Bond; and Putnam.

International — Brinson Partners.

Other managers: CIGNA and John Hancock.

The master trustee is Bankers Trust; the investment consultant is Hamilton.

Key personnel overseeing the investment management of the fund are C.J. David Davies, senior vice president and treasurer; Carl F. Stillwell, systems director-benefits financing; and Noreen King, director-benefits financing.

J.C. Penney Co. Inc.

	($ millions)
Total assets	3,308
Defined benefit	1,345
Defined contribution	1,963
ESOP	106
Other	1,857
Employer DB contributions	0
Benefit payments	34
Employer DC contributions	53
Internally managed assets:	
Total DC	775
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	72%
Fixed income	14%
Cash equivalents	6%
Real estate equity	8%
Defined contribution asset mix:	
Company stock	59%
Other stock	2%
GICs/BICs	39%

DALLAS — As of Sept. 30, J.C. Penney Co. Inc.'s total employee benefit assets were $3.308 billion, of which $1.345 billion was defined benefit and $1.963 billion was defined contribution.

Equity managers: Domestic — Batterymarch; GeoCapital; Leiber; Miller, Anderson & Sherrerd; and RCM.

International — Fidelity and Grantham, Mayo, Van Otterloo.

Fixed-income managers: Domestic — W.R. Huff; MacKay-Shields; and Neuberger & Berman.

Real estate managers: RREEF and TCW.

Other managers: Matrix; MBW; Sprout; U.S. Venture Partners; Vista; Wells Fargo; and Woodside.

The master trustee and global custodian is State Street Bank; the investment consultant is Frank Russell.

Peggy Bernard, benefit plans investment manager, oversees the investment management of the fund.

Pennsylvania Public School Employes' Retirement System

	($ millions)
Total assets*	15,430
Defined benefit	15,430
Employer DB contributions	990
Benefit payments	875

**as of June 30, 1989*

Internally managed assets	858
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	37%
Fixed income	39%
Cash equivalents	16%
Real estate equity	5%
Mortgages	1%
Global	2%

HARRISBURG, Pa. — As of June 30, the Pennsylvania Public School Employes' Retirement System's total employee benefit assets increased 18.7% to $15.43 billion from $12.999 billion nine months earlier. All the assets are defined benefit.

Equity managers: Domestic — Ariston Capital; Bankers Trust; Birmingham Capital; Brandywine; Brown Capital; Cashman, Farrell; Columbus Circle; Comstock; Cutler; Crabbe-Huson; Delaware Investment; Dreman; Eagle; Fielding; Glenmede Trust; Gulf; Hudson; Income Research; Mackenzie Financial; Mellon Bank; Mellon Capital; Miller Anderson & Sherrerd; Mortgage Government Security; Newbold's; Oppenheimer; Pilgrim Baxter; Princeton Money Managers; Provident Capital; Security Pacific; and TCW.

Fixed-income managers: Domestic — Criterion; Fidelity Bank; Glenmede Trust; Loomis, Sayles; Mellon Bank; Miller, Anderson, Sherrerd; Morgan Stanley; PIMCO; Pittsburgh National Bank; and Putnam.

Global — Beutel Goodman; Interquant; PCM; and WorldInvest.

Real estate managers: Fidelity Bank and Jones Lang Wootton.

Venture capital managers: APA/Fostin; CEO Venture; CIGNA; Commonwealth Venture; Genesis Seed Fund; Loyalhanna; and NEPA.

Short-term managers: Delaware Investment and the Pennsylvania Treasury.

Balanced manager: Mellon Capital.

The master trustee is First Pennsylvania Bank; the global custodian is State Street Bank; the investment consultants are Evaluation Associates, MacFarlane Realty and Springhouse Associates.

Key personnel overseeing the investment management of the fund are Clay Mansfield, chief investment officer; John Lane, director of investments; and Mike Grubic, investment officer.

Pennsylvania State Employes' Retirement System

	($ millions)
Total assets	9,504
Defined benefit	9,504
Employer DB contributions	414
Benefit payments	574
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	47%
Fixed income	22%
Cash equivalents	15%
Real estate equity	8%
Mortgages	7%
Other	1%

HARRISBURG, Pa. — As of Sept. 30, the Pennsylvania State Employes' Retirement System's total employee benefit assets increased 19.3% to $9.504 billion from $7.967 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Barrow, Hanley; Geewax, Terker; W.R. Huff; McGlinn; Miller, Anderson; Pilgrim, Baxter; Provident Investment; Sun Bank; Trinity; and Wells Fargo.

Fixed-income managers: Domestic — Delaware; Fidelity Bank; Mellon Bank; Miller, Anderson; and Payden & Rygel.

International — Miller, Anderson.

Tactical asset allocator: Wells Fargo.

Real estate managers: Aetna; Copley; Corporate Property Investors; F.I.A.; John Hancock; Heitman; JMB; Metric; Prudential; PSI; and Sentinel.

Venture capital managers: APA/Fostin; Butcher & Singer/Keystone; CEO Venture; Fostin Capital; Genesis Seed Fund; NEPA; Pittsburgh Seed Fund; PNC; TDH; and Zero Stage.

LBO managers: Brentwood; Maverick; Murphy & Fauver; and Russell Rea & Cappala.

Private placement manager: CIGNA.

The master custodian is the state treasurer; First Pennsylvania is the subcustodian; the investment consultants are Wilshire, Ronald A. Karp and Springhouse.

Key personnel overseeing the investment management of the fund are Kenneth G. Mertz II, chief investment officer, and Karen Nicely, assistant chief investment officer.

City of Philadelphia Municipal Pension Fund

	($ millions)
Total assets	1,754
Defined benefit	1,754
Employer DB contributions	162
Benefit payments	257
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	52.6%
Fixed income	34.2%
Cash equivalents	4.7%
Real estate equity	7.4%
Other	1.1%

PHILADEPHIA — As of Sept. 30 the City of Philadelphia Municipal Pension Fund's total employee benefit assets increased 11.2% to $1.754 billion from $1.578 billion a year earlier. All of the assets are defined benefit.

Equity managers: Domestic — Ariel; Bankers Trust; Columbus Circle; Cooke & Bieler; Delaware; Miller, Anderson & Sherrerd; NCM Capital; Nelson, Benson & Zellmer; Parametric; Peregrine; and Trinity.

International — Dimensional Fund Advisors; Parametric; SBC; and WorldInvest.

Fixed-income managers: Domestic — Criterion, 1838 Investment Advisors; Lincoln Capital; Miller, Anderson; PIMCO; and TCW.

Real estate managers: CIGNA; Copley; Dover; Grubb & Ellis; JMB; MIG Realty; and Public Storage.

Venture capital managers: CIGNA; Genesis Seed Fund; Hall; and Meridian.

First Pennsylvania is master custodian and global custodian; the consultants are Frank Russell Trust and MIG Realty.

Key personnel overseeing the investment management of the fund are Peter G. Crescitelli, executive director; and Margaret Samkavitz, investment analyst.

Philip Morris Inc.

	($ millions)
Total assets	7,470
Defined benefit	5,160
Defined contribution	2,310
Profit-sharing	1,200
401(k)	1,110
Employer DB contributions	0
Benefit payments	200
Employer DC contributions	132
Defined benefit asset mix:	
Stocks	70%
Fixed income	28%
Real estate equity	2%
Defined contribution asset mix:	
Company stock	24%
Other stock	31%
Cash equivalents	7%
GICs/BICs	38%

NEW YORK — As of Sept. 30, Philip Morris Inc.'s total employee benefit assets increased 66% to $7.47 billion from $4.5 billion a year earlier because of its acquisition of Kraft Inc. When the previous year's figures are combined, the increase drops to 22.3%. Defined benefit assets increased 15% as of Sept. 30, to $5.16 billion from the combined $4.482 billion. Defined contribution assets increased 42%, to $2.31 billion from a combined $1.626 billion.

Equity managers: Domestic — Alliance Capital; Ardsley Partners; Ariel; Sanford C. Bernstein; Chancellor; Chase Manhattan; Delphi Capital; Eagle; First Wisconsin; Glickenhaus; Neuberger Berman; Rosenberg Capital; Trinity; and Wellington.

International — Mellon-Pictet; Morgan Grenfell; and State Street Bank.

Fixed-income managers: Domestic — Fischer Francis; Loomis Sayles; PIMCO; and Reams.

Real estate managers: JMB Realty and TCW Realty.

Other managers: Blackstone Capital and Hancock Venture.

The master trustee and global custodian is State Street Bank.

Key personnel overseeing the investment management of the fund are B.J. Miller, vice president-benefit investments; Mary Lee Calimano, director-equities and administration; and Mark Werner, manager-capital markets.

Phillips Petroleum Co.

	($ millions)
Total assets	2,250
Defined benefit	450
Defined contribution	1,800
ESOP	500
Other	1,300
Employer DB contributions	0
Benefit payments	10
Employer DC contributions	25
Defined benefit asset mix:	
Stocks	35%
Fixed income	53%
Cash equivalents	2%
Real estate equity	8%
Mortgages	2%
Defined contribution asset mix:	
Company stock	65%
Fixed income	4%
Cash equivalents	1%
GICs/BICs	30%

BARTLESVILLE, Okla. — As of Sept. 30, Phillips Petroleum Co.'s total employee benefit assets increased 32.4% to $2.25 billion from $1.7 billion a year earlier. Defined benefit assets increased 50% during the same period, to $450 million from $300 million. Assets in its defined contribution plans increased 28.6% to $1.8 billion from $1.4 billion.

Equity managers: Domestic — Barrow, Hanley; Travelers; and Wells Fargo.

Fixed-income managers: Domestic — Equitable; J.P. Morgan; Prudential and Travelers.

Real estate managers: Citibank; JMB; and Victor Palmieri.

Other manager: Forstmann Little.

The master trustee is Citibank.

The key person overseeing the investment management of the fund is R.W. Holsapple, manager-foreign exchange and investment.

Plumbers, National Headquarters

	($ millions)
Total assets*	1,615
Defined benefit	1,615
Employer DB contributions	58

**P&I estimate*

WASHINGTON — As of Sept. 30, the Plumbers, National Headquarters employee benefit assets totaled an estimated $1.615 billion. The figures were estimated based on data from Money Market Directory.

The key person overseeing the investment management of the fund is Marsha Pugh, administrator.

PPG Industries Inc.

	($ millions)
Total assets	1,880
Defined benefit	1,026
Defined contribution	854
Employer DB contributions	1
Benefit payments	76
Employer DC contributions	36
Hedging devices used:	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	51%
Fixed income	47%
Cash equivalents	1%
GICs/BICs	1%
Defined contribution asset mix:	
Company stock	51%
Other stock	3%
Fixed income	1%
GICs/BICs	45%

PITTSBURGH — As of Sept. 30, PPG Industries Inc.'s total employee benefit assets were $1.88 billion. Defined benefit assets were $1.026 billion, and defined contribution plan assets were $854 million.

Equity managers: Domestic — Chancellor; Federated Securities; Fidelity Management Trust; Loomis Sayles; Mellon Capital; Neuberger & Berman; Pinnacle; and Reich & Tang.

International — Mellon Capital; Morgan Stanley; and Schroder Capital.

Fixed-income manager: Domestic

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H. DEAN BENNER

has joined our firm as

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(212) 269-3050

JANUARY 2, 1990

— J.P. Morgan.

The master trustee is Mellon Bank; the global custodian is Mellon-Pictet; the investment consultant is Frank Russell.

The key person overseeing the investment management of the fund is C.H. Elmer, manager-pension investment administration.

Board of Pensions of the Presbyterian Church (U.S.A.)

	($ millions)
Total assets	2,400
Defined benefit	2,400
Employer DB contributions	95
Benefit payments	105
Internally managed assets:	
Total DB	200
Defined benefit asset mix:	
Stocks	45%
Fixed income	30%
Cash equivalents	10%
Real estate equity	10%
GICs/BICs	5%

PHILADELPHIA — As of Sept. 30, Board of Pensions of the Presbyterian Church (U.S.A.)'s total employee benefit assets increased 20% to $2.4 billon from $2 billion a year earlier. All assets are in a combined defined benefit/defined contribution plan.

Equity managers: Domestic — GeoCapital; Kirr, Marbach; Morgan Grenfell; J.P Morgan; Quest; Templeton; Trusco; and Wells Fargo.

International — Capital Guardian; Marvin & Palmer; PCM; and Templeton.

Fixed-income managers: Domestic — Corestates; Loomis, Sayles; NCM; PIMCO; Reams; and Standish, Ayers & Wood.

International — Loomis, Sayles.

Real estate managers: CIGNA; Copley; Equitable; JMB; LaSalle; O'Connor; and TCW.

Venture capital: UNC.

The master trustee is Mellon Bank; the global subcustodian is Mellon Pictet; the investment consultants are Callan and Debatin.

Key personnel overseeing the investment management of the fund are Wm. Irwin Arbuckle II, vice president-investments and treasurer, and Judith D. Freyer, assistant treasurer.

Procter & Gamble Co.

	($ millions)
Total assets	4,970
Defined benefit	170
Defined contribution	4,800
Profit-sharing	3,770
Thrift or savings	30
ESOP	1,000
Employer DC contributions	200
Internally managed assets:	
Total DC	3,500
Defined benefit asset mix:	
Stocks	23%
Fixed income	77%
Defined contribution asset mix:	
Company stock	73%
Cash equivalents	6%
GICs/BICs	21%

CINCINNATI — As of Sept. 30, Procter & Gamble Co.'s total employee benefit assets increased 60.2% to $4.97 billion from $3.102 billion as of June 30, 1988. Defined benefit assets increased 14% during the same period, to $170 million from $149 million. Defined contribution assets increased 62.5%, to $4.8 billion from $2.953 billion.

Equity managers: Domestic — Aetna; Ariel; Babson; Bankers Trust; Fidelity Investments; IDS; Northern Trust; and Wells Fargo.

Fixed-income managers: Domestic — Bankers Trust; IDS; J.P. Morgan; Northern Trust; T. Rowe Price; and Wells Fargo.

The master trustees are Northern Trust, Bankers Trust and Bank of New York.

The investment consultant is SEI.

Key personnel overseeing the investment management of the fund are John R. Smith, manager-pension plans; Joe R. Lawhead, assistant treasurer; McKay F. Christensen, treasury analyst.

Prudential Insurance Co. of America

	($ millions)
Total assets	6,042
Defined benefit	4,691
Defined contribution	1,351
Thrift or savings	1,244
401(k)	107
Employer DB contributions	0
Benefit payments	117
Employer DC contributions	29
Internally managed assets:	
Total DB	4,691
Total DC	1,351
Defined benefit asset mix:	
Stocks	52%
Fixed income	30
Cash equivalents	8%
Real estate equity	10%
Defined contribution asset mix:	
Other stock	13%
Fixed income	87%

NEWARK, N.J. — As of Sept. 30, the Prudential Insurance Co. of America's total employee benefit assets increased 14.5% to $6.042 billion from $5.276 billion a year earlier. Defined benefit assets increased 14.9% during the same period, to $4.691 billion from $4.084 billion. Total defined contribution plan assets increased 13.3%, to $1.351 billion from $1.192 billion. All assets are managed by Prudential affiliates.

The investment consultant is Prudential Diversified Investment Strategies.

Key personnel overseeing the investment management of the fund are James H. Scott, managing director, and Michael A. Lenarcic, director-portfolio management.

Pensions & Investments will publish a special report on CFO and other financial executive salaries May 14.

R

Raytheon Co.

	($ millions)
Total assets	3,050
Defined benefit	2,288
Defined contribution	762
Profit-sharing	7
Thrift or savings	15
401(k)	672
ESOP	68
Employer DB contributions	10
Benefit payments	75
Employer DC contributions	50
Defined benefit asset mix:	
Stocks	72.8%
Fixed income	24.6%
Cash equivalents	2%
Real estate equity	0.6%
Defined contribution asset mix:	
Company stock	11%
Other stock	21%
GICs/BICs	68%

LEXINGTON, Mass. — As of Sept. 30, Raytheon Co.'s total employee benefit assets increased 25.5% to $3.05 billion from $2.43 billion a year earlier. Defined benefit assets increased 20.4% during the same period, to $2.288 billion from $1.9 billion. Defined contribution assets increased 43.8%, to $762 million from $530 million.

Equity managers: Domestic — Bankers Trust; Batterymarch; Boston Co.; Dewey Square; Fidelity; INVESCO; Loomis, Sayles; Paribas; Matrix; Rosenberg; State Street Research; and Sun Bank.

Fixed-income managers: Domestic — Richmond Capital and Loomis Sayles.

The master trustee is Boston Safe.

Key personnel overseeing the in-

Warner Communications Inc.

has merged with

Time Warner Inc.

formerly

Time Incorporated

The undersigned acted as financial advisor to Warner Communications Inc.

LAZARD FRÈRES & CO.

January 11, 1990

vestment management of the fund are Herbert Deitcher, senior vice president/treasurer; W. Bruce Livingston, manager-employee benefits financing; and Steven S. DeMeo, senior employee benefits financing specialist.

Rhode Island Retirement System

	($ millions)
Total assets	2,300
Defined benefit	2,300
Employer DB contributions	115
Benefit payments	110
Internally managed assets	230
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Short selling	
Defined benefit asset mix:	
Stocks	48%
Fixed income	30%
Cash equivalents	17%
Real estate equity	2%
International equities	3%

PROVIDENCE, R.I. — As of Sept. 30, the Rhode Island Retirement System's total employee benefit assets increased 20.4% to $2.3 billion from $1.911 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Bankers Trust; Boston Co.; H.T. Investors; Provident; and Van Liew Capital.

International — Alliance.

Fixed-income managers: Domestic — Brown Brothers and Fidelity Management.

Real estate managers: Aetna; Heitman; and Lehndorff & Babson.

Venture capital manager: Crossroads Capital.

State Street Bank is the master and global custodian; the investment consultant is Wilshire.

Key personnel overseeing the investment management of the fund are Jerome F. Williams, deputy general treasurer for finance, and Stephen F. Iafrate, fiscal manager/administrative officer.

RJR Nabisco Inc.

	($ millions)
Total assets	4,100
Defined benefit	2,700
Defined contribution	1,400
401(k)	1,400
Defined benefit asset mix:	
Stock	57%
Fixed income	24%
Real estate equity	6%
Cash equivalents	13%

NEW YORK — As of Sept. 30, RJR Nabisco Inc.'s total employee benefit assets increased 21.1% to $4.1 billion from $3.387 billion a year earlier. Defined benefit assets increased 8.4% during the same period, to $2.7 billion from $2.491 billion, while defined contribution assets, all in a 401(k) plan, increased 56.3% to $1.4 billion from $896 million.

The key person overseeing the investment management of the fund is John W. MacMurray, senior director-pension administration.

Rockwell International Corp.

	($ millions)
Total assets*	9,124
Defined benefit	6,624
Defined contribution	2,500

**P&I estimate*

PITTSBURGH — As of Sept. 30, Rockwell International Corp.'s total employee benefit assets were $9.124 billion, according to *Pensions & Investments'* estimate. Defined benefit assets are estimated at $6.624 billion, and defined contribution assets, $2.5 billion.

Key personnel involved in overseeing the investment management of the fund are Lee H. Cramer, vice president and treasurer, and Susan Leathers, director pension assets management.

The investment advisers directory will be published May 21.

S

San Francisco City & County Employees' Retirement System

	($ millions)
Total assets*	3,916
Defined benefit	3,792
Defined contribution	125
Employer DB contributions	217
Benefit payments	188
Employer DC contributions	0

**as of June 30, 1989*

Internally managed assets:	
Total DB	1,328
Defined benefit asset mix:	
Stocks	26%
Fixed income	39%
Cash equivalents	11%
Real estate equity	3%
Mortgages	10%
International stocks	6%
International bonds	5%

SAN FRANCISCO — As of June, 30, San Francisco City & County Employees' Retirement System's total employee benefit assets increased 17.9% to $3.916 billion from $3.322 billion a year earlier. Defined benefit assets increased 17.4% during the same period, to $3.792 billion from $3.229 billion. Defined contribution assets increased 34%, to $125 million from $93 million.

Equity managers: Domestic — Axe Core; Hanson; McCullough, Andrews & Capiello; Nicholas Applegate; RCM; George B. Springman; and Trinity.

International — Capital Guardian; Morgan Grenfell; and Oechsle.

Fixed-income managers: Domestic — Axe-Houghton; Caywood-Christian; MacKay-Shields; Miller, Anderson, Sherrerd; MacKay-Shields; Scudder, Stevens & Clark; and TCW.

International — Brinson Partners; Warburg.

Real estate manager: Coldwell Banker.

Venture capital managers: Bigler Partners & Crossroads.

The custodian is Bankers Trust; the investment consultant is Callan.

Key personnel overseeing the investment management of the fund are Clare M. Murphy, general manager, and Kenneth L. Shaffer, chief investment officer.

Sears, Roebuck & Co.

	($ millions)
Total assets	8,101
Defined benefit	2,974
Defined contribution	5,127
Other	5,127
Internally managed assets:	
Total DB	2,666
Total DC	5,019
Defined benefit asset mix:	
Stocks	60.6%
Fixed income	26%
Cash equivalents	1.1%
Real estate equity	3%
Other	9.3%
Defined contribution asset mix:	
Company stock	43.1%
Other stock	24.7%
Fixed income	14.1%
Cash equivalents	16.8%
International	1.3%

CHICAGO — As of Sept. 30, Sears, Roebuck & Co.'s total employee benefit assets increased 12.9% to $8.101 billion from $7.176 billion a year earlier. Defined benefit assets increased 11.5% during the same period, to $2.974 billion from $2.667 billion. Defined contribution assets increased 13.7% to $5.127 billion from $4.509 billion.

Equity managers: Domestic — Rosenberg Institutional Equity.

International — Capital Guardian and State Street Bank.

Real estate managers: Aldrich, Eastman & Waltch and Coldwell Banker.

The master trustee and global custodian is Continental Bank.

Key personnel overseeing the investment management of the fund, all with Sears Investment Management Co., are David V. Dootson, president; Michael Norton, vice president-fixed income; James M. Smith, vice president-venture capital and emerging growth; and David H. Williams, vice president-equities.

Shell Oil Co.

	($ millions)
Total assets	7,840
Defined benefit	3,700
Defined contribution	4,140
Thrift or savings	3,533
401(k)	403
ESOP	204
Employer DB contributions	74
Benefit payments	177
Employer DC contributions	93
Internally managed assets:	
Total DB	1,115
Total DC	3,118
Defined benefit asset mix:	
Stocks	51.3%
Fixed income	29.9%
Cash equivalents	4.3%
Real estate	12.5%
GICs/BICs	2%
Defined contribution asset mix:	
Company stock	3.9%
Other stock	7.8%
GICs/BICs	88.3%

HOUSTON — As of Sept. 30, Shell Oil Co.'s total employee benefit assets increased 17.3% to $7.84 billion from $6.686 billion a year earlier. Defined benefit assets increased 19% during the same period, to $3.7 billion from $3.108 billion. Defined contribution assets increased 15.7%, to $4.14 billion from $3.578 billion.

Equity managers: Domestic — Sanford Bernstein; Criterion; Equitable; Independence; Investment Research; Kemper; Mellon; Fayez Sarofim; and Wells Fargo.

International — AIG.

Fixed-income managers: Domestic — BEA; Sanford C. Bernstein; Chase; Duff & Phelps; and Texas Commerce.

Real estate managers: Aetna; First Chicago; Cabot, Cabot; Equitable; Hancock; Heitman; JMB; Prudential; and RREEF.

Other managers: Aetna; Allstate; Bank One; Confederation Life; Equitable; Hancock; Hartford; Metropolitan Life; Mutual Life of New York; New York Life; Pacific Financial; Prudential; The Principal; State Mutual; and Travelers.

The master trustee for the defined benefit plan is Bankers Trust; trustees for the defined contribution plan are NCNB-Texas and Texas Commerce; the global custodian is Boston Safe; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are L.S. Chaikind, administrator, and J.B. Kloehr, secretary.

South Carolina Retirement System

	($ millions)
Total assets*	7,072
Defined benefit	7,072
Employer DB contributions	266
Benefit payments	295

**as of June 30, 1989*

Internally managed assets:	
Total DB	7,072
Defined benefit asset mix:	
Fixed income	91%
Cash equivalents	9%

COLUMBIA, S.C. — As of Sept. 30, South Carolina Retirement System's total employee benefit assets increased 17.7% to $7.072 billion from $6.009 billion. All assets are in defined benefit plans.

Jamison, Eaton & Wood Co. is the investment management consultant.

Key personnel overseeing the investment management of the fund are Grady L. Patterson Jr., state treasurer; Sandy A. Huey, deputy state treasurer; and Chuck Sanders, senior assistant state treasurer.

The Southern Co.

	($millions)
Total assets	3,100
Defined benefit	2,400
Defined contribution	700
401(k)	700
Employer DB contributions	25
Benefit payments	55
Employer DC contributions	50
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	

ATLANTA — As of Sept. 30, The Southern Co.'s total employee benefit assets increased 19.2% to $3.1 billion from $2.6 billion a year earlier. Defined benefit assets increased 20% during the same period, to $2.4 billion from $2 billion. Assets in its defined contribution plan increased 16.7%, to $700 million from $600 million.

Equity managers: Domestic — AmSouth Bank; INVESCO; Jundt/Capen; Lieber; Miller, Anderson & Sherrerd; Northern Capital; Spears, Benzak; and Strong/Corneliuson.

Fixed-income managers: Domestic — Discount Corp. Advisors; First Wachovia; and Trusco.

The master trustee is Banker's Trust.

The key person overseeing the investment management of the fund is David Prince, assistant treasurer.

Annuity Board of the Southern Baptist Convention

	($ millions)
Total assets	2,559
Defined benefit	822
Defined contribution	1,737
Other	1,737
Employer DB contributions	0
Benefit payments	30
Internally managed assets:	
Total DB	39
Defined benefit asset mix:	
Stocks	51%
Fixed income	35%
Real estate equity	2%
Mortgages	2%
GICs/BICs	10%
Defined contribution asset mix:	
Other stock	18%
Fixed income	13%
Cash equivalents	5%
GICs/BICs	64%

DALLAS — As of Sept. 30, the Annuity Board of the Southern Baptist Convention's total employee benefit assets increased 15.1% to $2.559 billion from $2.223 billion a year earlier. Defined benefit assets increased 13.1% during the same period, to $822 million from $727 million. Defined contribution assets increased 16.3%, to $1.737 billion from $1.493 billion.

Equity managers: Domestic — Barrow, Hanley; Capital Guardian; Eagle; Gamco; Ganucheau, Stupfel & Brumley; JMC; Luther King; Lazard Freres; Loomis, Sayles; Munder; Provident; RCM; Sasco; Scudder, Stevens; and Sirach/Flinn, Elvins.

International — Hill Samuel and SBC.

Fixed-income managers: Domestic — Sanford C. Bernstein; Loomis, Sayles; MacKay-Shields; J.P. Morgan; STW; and Western Asset.

Options overwriter manager: Loomis, Sayles.

The master trustee is Northern Trust; the investment consultant is SEI.

Key personnel overseeing the investment management of the fund are John R. Jones and Dave L. Borders, vice presidents.

Southern California Edison

	($ millions)
Total assets	2,380
Defined benefit	1,580
Defined contribution	800
401(k)	560
ESOP	240
Employer DB contributions	45
Benefit payments	56
Hedging devices used:	
Stock options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	64%
Fixed income	22%
Cash equivalents	1%
Real estate equity	4%
GICs/BICs	5%
Other	4%
Defined contribution asset mix:	
Company stock	76%
Other stock	5%
Fixed income	2%
Cash equivalents	3%
GICs/BICs	10%
Balanced fund	4%

ROSEMEAD, Calif — As of Sept. 30, Southern California Edison's total employee benefit assets increased 13.1% to $2.38 billion from $2.104 billion a year earlier. Defined benefit assets increased 21.7% during the same period, to $1.58 billion from $1.298 billion. Defined contribution assets decreased about 1%, to $800 million from $806 million.

Equity managers: Domestic — Dimensional Fund; Dodge & Cox; Hotchkis & Wiley; Jundt/Capen; Mellon; Pacific Financial; RCM; Rosenberg Institutional; and Sit Investment.

International — Acadian; Batterymarch; TCW; and Warburg.

Fixed-income managers: Domestic — NCM; PIMCO and RCM.

Real estate managers: Equitable; JMB; LaSalle; Pacific Mutual; and TCW.

Options Manager: MCQ Inc.

Overwriting Manager: Bankers Trust.

Cash manager: Payden & Rygel.

The master trustee is Security Pacific; the global custodian is Mitsubishi; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are W. James Scilacci, manager-pension investments, and Rick Yamamoto, supervisor-pension investments.

Southern California UFCW & Food Employers Pension Trust Fund

	($ millions)
Total assets	2,133
Defined benefit	2,133
Employer DB contributions	124
Benefit payments	117
Internally managed assets	46
Hedging devices used:	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	36.9%
Fixed income	42.5%
Cash equivalents	4%
Real estate equity	3.9%
Mortgages	0.1%
GICs/BICs	12.6%

CYPRESS, Calif. — As of Sept. 30, the Southern California United Food & Commercial Workers & Food Employers Pension Trust Fund's total employee benefit assets increased 45.7% to $2.133 billion from $1.464 billion a year earlier. All of the assets are defined benefit.

Equity managers: Domestic — Batterymarch; Cramblit & Carney; Lazard Freres; Oppenheimer; and Wells Fargo.

Fixed-income managers: Domestic — PIMCO; Putnam; TCW; and Weiss, Peck & Greer.

Real estate managers: LaSalle; Lehndorff & Babson; McMorgan; Prudential; and Smith Barney Birtcher.

Other managers: Morley and Patterson Capital.

The master trustee is First Interstate Bank; the investment consultants are R.V. Kuhns and Institutional Property Consultants.

Key personnel overseeing the investment management of the fund are P. Colleen Thompson, administrator, and Joel F. Meltz, controller.

Southern New England Telephone Co.

	($ millions)
Total assets	1,912
Defined benefit	1,640
Defined contribution	272
Other	272
Employer DB contributions	0
Benefit payments	61
Employer DC contributions	10
Hedging devices used:	
Stock options	
Stock index futures	
Defined benefit asset mix:	
Stocks	60%
Fixed income	31%
Cash equivalents	1%
Real estate equity	6%
Other	2%
Defined contribution asset mix:	
Company stock	30%

Other stock	6%
GICs/BICs	64%

NEW HAVEN, Conn.— As of Sept. 30, Southern New England Telephone Co.'s total employee benefit assets increased 17.7% to $1.912 billion from $1.625 billion a year earlier. Defined benefit assets increased 17.1% during the same period, to $1.64 billion from $1.4 billion. Defined contribution assets increased 20.9% to $272 million from $225 million.

Equity managers: Domestic — ANB; Analytic; Barrow, Hanley; Connecticut National Bank; Moran; Wellington; and Wells Fargo.

International — Mercator; Posthorn; and Wells Fargo.

Fixed-income managers: Domestic — Dreyfus; Equitable; Putnam; STW; and Wells Fargo.

Real estate managers: CIGNA; JMB; LaSalle; Schroder Real Estate; and Sentinel.

Other managers: Columbine Venture Funds; Hellman & Friedman Capital; Recovery Equity Partners; Triumph Capital; and Rimco Oil & Gas.

The master trustees are Boston Safe Deposit for the defined benefit plans and Bankers Trust for the defined contribution plans.

The global custodian is Boston Safe Deposit.

Key personnel overseeing the investment management of the fund are John J. Miller, assistant secretary and assistant treasurer, and Katherine R. Griswold, staff specialist.

Southwestern Bell Corp.

	($ millions)
Total assets	8,334
Defined benefit	7,166
Defined contribution	1,168
Thrift or savings	1,168
Employer DB contributions	0
Benefit payments	275
Employer DC contributions	43

Defined benefit asset mix:	
Stocks	58.2%
Fixed income	29.1%
Cash equivalents	0.7%
Real estate equity	10.5%
Other	1.5%
Defined contribution asset mix:	
Company stock	39.6%
Other stock	21%
Fixed income	3.5%
Cash equivalents	2.5%
GICs/BICs	33.4%

ST. LOUIS — As of Sept. 30, Southwestern Bell Corp.'s total employee benefit assets increased 19.7% to $8.334 billion from $6.961 billion a year earlier. Defined benefit assets increased 17.7% during the same period, to $7.166 billion from $6.086 billion. Assets in its defined contribution plan increased 33.5%, to $1.168 billion from $875 million.

Equity managers: Domestic — Dynastat; Franklin; GeoCapital; Jennison; NFJ Investment Group; Nicholas Applegate; Pilgrim Baxter; Rosenberg Institutional; Sasco Capital; Southeastern Asset; and Wells Fargo.

International — IDS; Nomura; and Wells Fargo.

Fixed-income managers: Domestic — Jennison and Mississippi Valley.

Real estate managers: Boston Counsel; Heitman; and McMahan.

Other managers: Bigler and Brinson Partners.

The master trustee is NCNB Texas; the global custodian is Chase; the investment consultant is Buck.

Key personnel overseeing the investment management of the fund are M.A. Devine, director-pension investments, and C. Weaver, director-pension fund.

State Farm Insurance Cos.

	($ millions)
Total assets*	3,084
Defined benefit	2,526
Defined contribution	558

**P&I estimate*

BLOOMINGTON, Ill. — As of Sept. 30, State Farm Insurance Cos.' total employee benefit assets were $3.084 billion, *Pensions & Investments* estimates.

T

Teachers Insurance and Annuity Association — College Retirement Equities Fund

	($ millions)
Total assets	81,000
Defined contribution	81,000
Employer DC contributions	3,600

Internally managed assets	81,000
Defined contribution asset mix:	
Other stock	44%
Fixed income	25%
Cash equivalents	4%
Other	27%

NEW YORK — As of Sept. 30, the Teachers Insurance Annuity Association — College Retirement Equities Fund's total employee benefit assets increased 20.6% to $81 billion from $67.141 billion a year earlier. All assets are in defined contribution plans.

TIAA-CREF, the nation's largest pension plan, is managed internally. Investments include $26 billion in indexed stocks, $4 billion in international stocks; $3 billion in real estate equity; $18 billion in mortgages; $1.7 billion in mortgage-backed securities; and $53 million in foreign bonds.

Other investments include $700 million in leveraged buy-outs and $10 billion in private placements.

The master custodians for TIAA are Citibank and Morgan Guaranty. The master custodians for CREF are Bankers Trust and Morgan Guaranty; global custodians are Bankers and Chase Manhattan.

Overseeing TIAA investments are J. Daniel Lee Jr., executive vice president, TIAA investments; David B. Bullett, senior vice president, TIAA investments; and John A. Sommers, senior vice president, TIAA mortgage and real estate.

Key personnel overseeing CREF investments are James S. Martin, executive vice president, CREF investments; C. Oscar Morong Jr., senior vice president and director, CREF domestic active investments; and Virgil H. Cumming, vice president and director, CREF international investments.

Teamsters, Central States, Southeast & Southwest Areas Pension Fund

	($ millions)
Total assets	9,849
Defined benefit	9,849
Employer DB contributions	744
Benefit payments	898

Internally managed assets:	
Total DB	117
Defined benefit asset mix:	
Stocks	30.7%
Fixed income	64.1%
Cash equivalents	5.1%
Real estate equity	0.1%

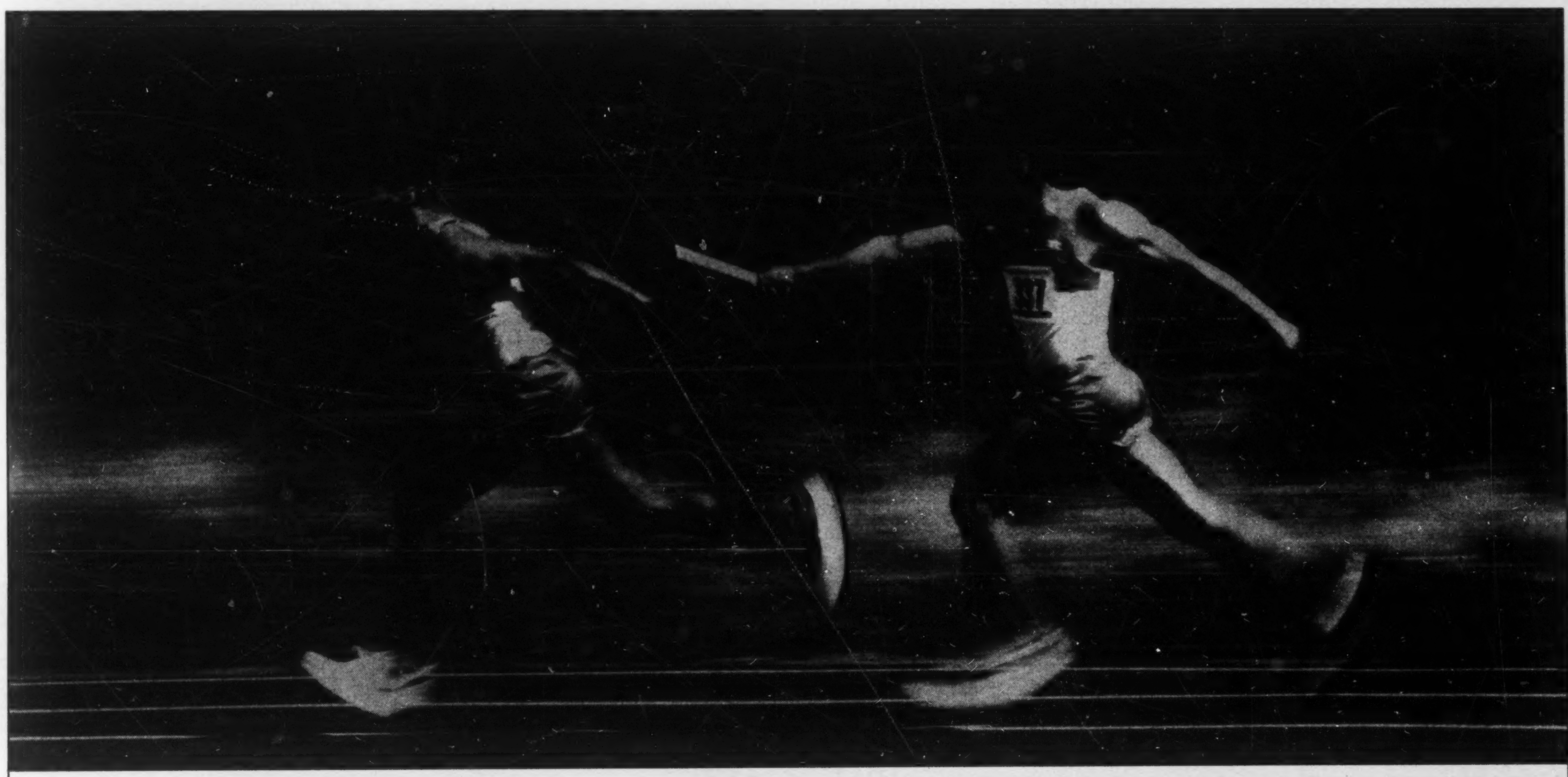
CHICAGO — As of Sept. 30, the Teamsters, Central States, Southeast & Southwest Areas Pension Fund's total assets increased 16.3% to $9.849 billion from $8.469 billion a year earlier. All assets are defined benefit.

Equity managers: BEA; Equitable; INVESCO; Lynch & Mayer; Mellon Capital; Putnam; and Wells Fargo.

Fixed-income managers: Domestic — Bankers Trust; Fiduciary Trust; Lincoln; MacKay-Shields; Mellon Bank; Miller, Anderson & Sherrerd; and T. Rowe Price.

Real-estate managers: Eastdil and Karsten.

Short-term cash equivalents: Mellon Bank.



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The custodian is Mellon Bank.

Morgan Stanley Group Inc. as named fiduciary oversees the investment management of the fund.

Western Conference of Teamsters' Pension Trust

	($ millions)
Total assets*	9,084
Defined benefit	9,084

**P&I estimate*

SEATTLE — As of Sept. 30, the Western Conference of Teamsters' Pension Trust's employee benefit assets were $9.084 billion, *Pensions & Investments* estimates based on information from Money Market Directory.

Teledyne Inc.

	($ millions)
Total assets*	1,668
Defined benefit	1,668

**Money Market Directory*

LOS ANGELES — Teledyne Inc.'s total employee benefit assets were $1.668 billion as of June 30, according to the Money Market Directory. All assets are defined benefit. Figures for the previous year were not available.

Tenneco Inc.

	($ millions)
Total assets	2,877
Defined benefit	2,074
Defined contribution	803
401(k)	803
Internally managed assets:	
Total DC	750
Defined benefit asset mix:	
Stocks	63%
Fixed income	34%
Cash equivalents	3%
Defined contribution asset mix:	
Company stock	17%
Other stock	4%
Fixed income	2%
Cash equivalents	73%
Other	4%

HOUSTON — As of Sept. 30, Tenneco Inc.'s total employee benefit assets increased 13.1% to $2.877 billion from $2.542 billion a year earlier. Defined benefit assets increased 20.8% during the same period, to $2.074 billion from $1.717 billion. Defined contribution assets decreased 2.7%, to $803 million from $825 million.

Equity managers: Domestic — Sanford Bernstein; Capstone; Delaware; Dimensional Fund; IDS; and Fayez Sarofim.

Fixed-income managers: Domestic — Capstone; Fischer, Francis; J.P. Morgan; State Street Research; and STW.

Other manager: Bridge Capital.

The master trustee is Bankers Trust; the investment consultant is Callan.

Key personnel overseeing the investment management of the fund are Kenneth W. Reese, chairman-investment committee, and R.A. Robinson, executive director-investments.

Tennessee Consolidated Retirement System

	($ millions)
Total assets	8,075
Defined benefit	8,075
Employer DB contributions	160
Internally managed assets	8,075
Defined benefit asset mix:	
Stocks	34%
Fixed income	50.2%
Cash equivalents	6%
International	9.8%

NASHVILLE, Tenn. — As of Sept. 30, the Tennessee Consolidated Retirement System's total employee benefit assets increased 21.6% to $8.075 billion from $6.643 billion. All assets are defined benefit and managed internally.

Chase Manhattan is the master and global custodian. Beginning in 1990, the investment consultant is Callan.

Key personnel overseeing the investment management of the fund are Charles Webb, chief investment officer; Marshall Cox, fixed-income portfolio manager; and Jeremy Conlin, equity portfolio manager.

Tennessee Valley Authority Retirement System

	($ millions)
Total assets	3,090
Defined benefit	2,894
Defined contribution	196
Thrift or savings	130
401(k)	66
Employer DB contributions	80
Benefit payments	120
Defined benefit asset mix:	
Stocks	53%
Fixed income	40%
Cash equivalents	5%
GICs/BICs	2%
Defined contribution asset mix:	
Other stock	9%
GICs/BICs	91%

KNOXVILLE, Tenn. — As of Sept. 30, the TVA Retirement System's total employee benefit assets increased 23.6% to $3.09 billion from $2.5 billion a year earlier. Defined benefit assets increased 20.6% during the same period, to $2.894 billion from $2.4 billion. Defined contribution assets increased 96%, to $196 million from $100 million.

Equity managers: Domestic — Disciplined Investment; Geewax Terker; Mellon Capital; Morgan Grenfell; North Carolina Mutual; Rosenberg Institutional; and Sun Bank.

Fixed-income managers: Domestic — Duff & Phelps; W.R. Huff; Lord, Abbett; Mellon Capital; and PIMCO.

The master trustee is Mellon Bank; the investment consultant is Wilshire.

Key personnel overseeing the investment management of the fund are Kathy J. White, executive secretary, and Larry Edwards, chairman of the board.

Texaco Inc.

	($ millions)
Total assets	3,200
Defined benefit	1,300
Defined contribution	1,900
ESOP	500
Other	1,400
Employer DB contributions	51
Benefit payments	165
Internally managed assets:	
Total DB	50
Defined benefit asset mix:	
Stocks	46%
Fixed income	36%
Cash equivalents	11%
Real estate equity	7%

WHITE PLAINS, N.Y. — As of Sept. 30, Texaco Inc.'s total employee benefit assets were $3.2 billion. Defined benefit assets were $1.3 billion and defined contribution assets were $1.9 billion.

Equity managers: Domestic — Alliance; Harris Associates; INVESCO; McCowan Associates; Mellon Capital; J.P. Morgan; and Trinity.

Fixed-income managers: Domestic — WR Lazard and J.P. Morgan.

Real estate managers: Aetna; Copley; Equitable; J.P. Morgan; Prudential; and Travelers.

The master trustee is Chase Manhattan; the investment consultant is Wilshire.

The key person overseeing the investment management of the fund is Shelby Faber, manager-pensions and benefits.

Texas County and District Retirement System

	($ millions)
Total assets	2,000
Defined contribution	2,000
Defined contribution asset mix:	
Fixed income	100%

AUSTIN, Texas — As of Sept. 30, the Texas County and District Retirement System's total employee benefit assets increased 11.8% to $2 billion from $1.789 billion a year earlier. All assets are in a defined contribution plan.

The master custodian is Texas Commerce.

Key personnel overseeing the investment management of the fund are J. Robert Brown, director; Terry Horton, assistant director; and Ronald Schultz, investment consultant.

Employees Retirement System of Texas

	($ millions)
Total assets	5,969
Defined benefit	5,969
Employer DB contributions	174
Benefit payments	189
Internally managed assets	5,969
Defined benefit asset mix:	
Stocks	27%
Fixed income	70%
Cash equivalents	3%

AUSTIN, Texas — As of Sept. 30, the Employees Retirement System of Texas total employee benefit assets increased 16.9% to $5.969 billion from $5.108 billion a year earlier.

Equity adviser: Domestic — INVESCO.

Fixed-income adviser: Domestic — Duff & Phelps.

The master trustee is NCNB-Texas.

Key personnel overseeing the investment management of the fund are Clayton T. Garrison, executive director; Nancy. G. Goerdel, deputy director for investments; and Stephen P. Arnold, assistant investment officer.

Texas Municipal Retirement System

	($ millions)
Total assets	2,200
Defined contribution	2,200
Internally managed assets	2,200
Defined contribution asset mix:	
Fixed income	100%

AUSTIN, Texas — As of Sept. 30, the Texas Municipal Retirement System's total employee benefit assets increased 22.2% to $2.2 billion from $1.8 billion a year earlier. All assets are in a defined contribution plan.

The master custodian is First City, Austin; the investment adviser is Duff & Phelps.

Key personnel overseeing the investment management of the fund are Jimmie L. Mormon, director, and Preston G. Craig, investment officer.

Teacher Retirement System of Texas

	($ millions)
Total assets	23,500
Defined benefit	23,500
Employer DB contributions	700
Benefit payments	900
Internally managed assets:	
Total DB	23,500
Defined benefit asset mix:	
Stocks	30.6%
Fixed income	57.4%
Cash equivalents	3%
Mortgages	9%

AUSTIN, Texas — As of Sept. 30, the Teacher Retirement System of Texas' total employee benefit assets increased 20.9% to $23.5 billion from $19.439 billion a year earlier. All assets are defined benefit.

Key personnel overseeing the investment management of the fund are Joe Perrone, chief investment officer; George Reagan, investment officer-equities; Jack Cooper, investment officer-fixed income; and Gene Richeman, investment officer-real estate.

Textron Inc.

	($ millions)
Total assets*	3,121
Defined benefit	2,319
Defined contribution	802
Profit-sharing	164
ESOP	638
Employer DB contributions	20
Benefit payments	144

**as of Oct. 31, 1989*

Internally managed assets:	
Total DB	2,100
Defined benefit asset mix:	
Stocks	27%
Fixed income	43%
Cash equivalents	12%
Real estate equity	8%
GICs/BICs	3%
Private placements	7%
Defined contribution asset mix:	

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Fixed income	42%
Cash equivalents	1%
GICs/BICs	4%
Other	53%

PROVIDENCE, R.I. — As of Oct. 31, Textron Inc.'s total employee benefit assets increased 11.8% to $3.121 billion from $2.792 billion a year earlier. Defined benefit assets increased 9.1% during the same period, to $2.319 billion from $2.126 billion. Defined contribution assets increased 20.4%, to $802 million from $666 million.

Equity managers: Domestic — Sanford C. Bernstein; Delaware Investment; Trinity; and Wellington.

Fixed-income manager: Domestic — AMCORE Bank.

Real estate manager: Prudential.

The master trustee is Bankers Trust.

The key person overseeing the investment management of the fund is Richard A. Watson, vice president.

Trans World Airlines Inc.

	($ millions)
Total assets	2,470
Defined benefit	1,055
Defined contribution	1,415
401(k)	161
ESOP	9
Other	1,245
Employer DB contributions	41
Benefit payments	31
Employer DC contributions	27
Internally managed assets:	
Total DB	690
Defined benefit asset mix:	
Stocks	41%
Fixed income	17%
Cash equivalents	31%
Real estate equity	2%
GICs/BICs	9%
Defined contribution asset mix:	
Other stock	64%
Fixed income	1%
Cash equivalents	5%
GICs/BICs	21%
Real estate	9%

KANSAS CITY, Mo. — As of Sept. 30, Trans World Airlines Inc.'s total employee benefit assets increased 17.4% to $2.47 billion from $2.104 billion a year earlier. Defined benefit assets increased 19.6% during the same period, to $1.055 billion from $882 million. Defined contribution assets increased 15.8%, to $1.415 billion from $1.222 billion.

Equity managers: Domestic — Estabrook; Federated Investment; Fidelity Management; Fort Hill; Frontier; GAMCO, McGlinn; Mellon Capital; J.P. Morgan; Shields; State Street Research; Twentieth Century; and Wells Fargo.

International — SBC International; State Street Bank; and WorldInvest.

Fixed-income managers: Domestic — Estabrook; Fidelity Management; Fort Hill; Frontier; GAMCO; McGlinn; J.P. Morgan; Shields; State Street Research; and Wells Fargo.

Real estate managers: Aetna; Citibank; Coldwell Banker; Lomas & Nettleton; J.P. Morgan; NCNB; State Street Bank; and TCW.

GIC managers: Boston Co.; Morley; and PRIMCO.

The master trustee and global custodian is Boston Safe.

Key person overseeing the investment management of the fund is Gary D. Dilley, director-pension finance.

The Travelers Insurance Cos.

	($ millions)
Total assets	2,075
Defined benefit	1,554
Defined contribution	521
Thrift or savings	324
401(k)	133
Other	64
Employer DB contributions	51
Benefit payments	45
Employer DC contributions	9
Internally managed assets:	
Total DB	1,554
Total DC	521
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	41%
Fixed income	10%
Cash equivalents	5%
Real estate equity	5%
GICs/BICs	27%
Other	12%
Defined contribution asset mix:	
Company stock	37%
Other stock	7%
Fixed income	56%

HARTFORD, Conn. — As of Sept. 30, The Travelers Insurance Cos.' total employee benefit assets had increased 13.4% to $2.075 billion from $1.83 billion a year earlier. Defined benefit assets increased 12.9% during the same period, to $1.554 billion from $1.376 billion. Assets in its defined contribution plans increased 14.8%, to $521 million from $454 million. All assets are managed internally or by subsidiaries of Travelers.

The master trustee is Connecticut National Bank; the global custodian is Morgan Guaranty.

Key personnel overseeing the investment management of the fund are Richard Shima, executive vice president, Travelers Insurance Co.; Thomas O. Thorsen, executive vice president, Travelers Insurance Co.; and David M. Dunford, president, TIMCO.

TRW Inc.

	($ millions)
Total assets	3,096
Defined benefit	2,103
Defined contribution	993
401(k)	993
Employer DB contributions	28
Benefit payments	90
Employer DC contributions	33
Internally managed assets:	
Total DB	129
Defined benefit asset mix:	
Stocks	58%
Fixed income	27%
Cash equivalents	14%
Venture capital	1%
Defined contribution asset mix:	
Company stock	47%
Other stock	20%
GICs/BICs	33%

CLEVELAND — As of Sept. 30, TRW Inc.'s total employee benefit assets increased to $3.096 billion. Defined benefit assets increased to $2.103 billion; defined contribution assets increased to $993 million.

Equity managers: Domestic — Alliance; Baring America; Sanford Bernstein; Boston Safe Deposit; Campbell Advisors; Eagle; Investment Counselors of Maryland; and Westwood Management.

International — Baring International and Ivory & Sime.

Fixed-income managers: Domestic — Hoisington; MacKay-Shields; and PIMCO.

International — J.P. Morgan and Morgan Grenfell.

Other manager: Boston Safe Deposit.

The master trustee and global custodian is Boston Safe Deposit.

Robert M. Hamje, president-TRW Investment Management Co., oversees the investment management of the fund.

U

Union Carbide Corp.

	($ millions)
Total assets	2,693
Defined benefit	2,095
Defined contribution	598
Employer DB contributions	57
Benefit payments	86
Employer DC contributions	20
Internally managed assets:	
Total DB	2,059
Defined benefit asset mix:	

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Stocks	24%
Fixed income	65%
Real estate equity	3%
Mortgages	3%
Annuities	2%
Private placements	3%
Defined contribution asset mix:	
Company stock	10%
Other stock	5%
GICs/BICs	85%

DANBURY, Conn.— As of Sept. 30, Union Carbide Corp.'s total employee benefit assets stood at $2.693 billion. No comparison with previous year data is possible because the company did not include its defined contribution assets in that total. Defined benefit assets increased 22.4% to $2.095 billion from $1.711 billion a year earlier.

Benefit Capital Management Corp., a subsidiary of Union Carbide, handles the management of the Union Carbide pension fund's defined benefit plan assets.

Equity manager: Domestic — BEA (defined contribution).

GIC manager: Met Life (defined contribution).

The master trustee is Manufacturers Hanover Trust.

Key personnel overseeing the investment management of the fund, all Benefit Capital executives, are Michael F. Hoben, president; Robert Burstein, senior vice president; Lawrence R. Fuller, senior vice president; and Harold T. Dalcher, senior vice president.

Unisys Corp.

	($ millions)
Total assets*	5,022
Defined benefit	3,206
Defined contribution	1,816
401(k)	1,186
Employer DB contributions	52
Benefit payments	178
Employer DC contributions	47

**as of Aug. 31, 1989*

Defined benefit asset mix:	
Stocks	64.3%
Fixed income	13.1%
Cash equivalents	2.9%
Real estate equity	7.4%
GICs/BICs	5%
International stock	5.4%
Venture capital	1.9%
Defined contribution asset mix:	
Company stock	6.2%
Other stock	13.4%
Fixed income	7.9%
Cash equivalents	4.8%
GICs/BICs	67.7%

BLUE BELL, Pa. — As of Aug. 31, Unisys Corp.'s total employee benefit assets increased 17% to $5.022 billion from $4.281 billion a year earlier. Defined benefit assets increased 20% during the same period, to $3.206 billion from $2.667 billion. Assets in its defined contribution plan increased 12.5% to $1.816 billion from $1.614 billion.

Equity managers: Domestic — Fred Alger; BEA; Chase; Concord Capital; Geewax Terker; Independence Investment; Lazard Freres; Mellon Equity; MTH Asset Management; Nicholas Applegate; NWQ Investment; Pacific Financial Research; PRIMECAP; Rosenberg; Thomson, Horstmann & Bryant; Travelers Investment Management; United Capital; and Wells Fargo.

International — Mercator; Travelers; and Wellington.

Fixed-income managers: Domestic — Harris Trust; M.D. Sass; and Security Capital.

Real estate managers: AMLI Southwest; Chemical Bank; Connecticut General Real Estate; Coldwell; GE Investment Realty; JMB; LaSalle; and RCB.

Venture capital managers: Abbott Capital; Blackstone Capital; Carl Marks Levered Equities; Norton Partners; T. Rowe Price; Recovery Equity Investors; Robertson Colman; and Ventures Trident.

GIC managers: Aetna; Hancock; Metropolitan Insurance; and Travelers.

401 (k) managers: Allstate; Brinson Partners; Connecticut General; Confederation Life; Executive Life; First National Bank of Chicago; Manufacturers Hanover; Metropolitan Life; Mutual Benefit Life; Northern Trust; Pacific Mutual Life; The Principal; Provident National; Prudential Insurance; Rogers, Casey; Seafirst Bank; State Mutual Life; Sun Life; Union Central Life; Travelers; and Wells Fargo.

The master trustees are Harris Trust for the defined benefit plan and Northern Trust for the 401(k) plan; the global custodian is Harris Trust/Mitsubishi; the investment consultant is Rogers, Casey.

Key personnel overseeing the investment management of the fund are David A. White, vice president-capital management; and Charles A. Service, director-U.S. programs.

United Airlines Inc.

	($ millions)
Total assets	3,700
Defined benefit	2,000
Defined contribution	1,700
Thrift or savings	1,200
401(k)	500
Employer DB contributions	70
Benefit payments	72
Employer DC contributions	60
Hedging devices used:	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	48%
Fixed income	42%
Cash equivalents	3%
Real estate equity	7%
Defined contribution asset mix:	
Other stock	35%
Fixed income	65%

CHICAGO — As of Sept. 30, United Airlines Inc.'s total employee benefit assets increased 12.1% to $3.7 billion from $3.3 billion a year earlier. Defined benefit assets increased 11.1% during the same period, to $2 billion from $1.8 billion. Defined contribution assets increased 13.3%, to $1.7 billion from $1.5 billion.

Equity managers: Domestic — Cambiar; First Manhattan; Hotchkis and Wiley; Lincoln Capital; McCowan; Sit; Weiss, Peck & Greer; and Wells Fargo.

International — HD International and Hill Samuel.

Fixed-income managers: Domestic — Sanford Bernstein; J.P. Morgan; and PIMCO.

Real estate managers: LaSalle; PMRealty; and RREEF.

The master trustee and global custodian is National Bank of Detroit; the investment consultant is Frank Russell.

The key person overseeing the investment management of the fund is David J. Dykstra, director-pension assets.

General Board of Pensions of the United Methodist Church

	($ millions)
Total assets	3,566
Defined benefit	1,575
Defined contribution	1,991
Other	1,991
Employer DB contributions	0
Benefit payments	111
Employer DC contributions	174
Internally managed assets:	
Total DB	149
Defined benefit asset mix:	
Stocks	60%
Fixed income	17%
Cash equivalents	10%
Real estate equity	4%
GICs/BICs	9%
Defined contribution asset mix:	
Other stock	56%
Fixed income	21%
Cash equivalents	10%
GICs/BICs	10%
Real estate	3%

EVANSTON, Ill. — As of Sept. 30, the General Board of Pensions of the United Methodist Church's total employee benefit assets increased 22.8% to $3.566 billion from $2.903 billion a year earlier. Defined benefit assets increased 6.4% during the same period, to $1.575 billion from $1.48 billion. Defined contribution assets increased 39.9%, to $1.991 billion from $1.423 billion.

Equity managers: Domestic — ANB; Ariel; Batterymarch; Capital Guardian; Columbus Circle; Delaware; Fidelity Management; INVESCO; Nicholas-Applegate; Olympic; Provident Investment; RCM; Westwood.

Fixed-income managers: Domestic — ANB; CIGNA; Criterion; Lincoln; STW.

Real estate managers: CIGNA; JMB.

Balanced managers: Delaware; Franklin.

The master custodian is Mellon Bank; the investment consultant is Hotchkiss and Associates.

Key personnel overseeing the investment management of the fund are F. Gale Whitson-Schmidt, chief financial officer; Diane Pinney, treasurer; and Mary Pat Kincaid, director of portfolio.

UMWA Health & Retirement Funds

	($ millions)
Total assets	5,300
Defined benefit	5,289
Defined contribution	11
401(k)	11
Employer DB contributions	62
Benefit payments	443
Internally managed assets:	
Total DB	650
Hedging devices used:	
Stock options	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	46%
Fixed income	47%
Cash equivalents	4%
Real estate equity	3%
Defined contribution asset mix:	
Other stock	23%
Fixed income	13%
Cash equivalents	42%
GICs/BICs	22%

WASHINGTON — As of Sept. 30, the UMWA Health & Retirement Funds' total employee benefit assets increased 12.8% to $5.3 billion from $4.7 billion a year earlier. Defined benefit assets increased 12.6% during the same period, to $5.28 billion from $4.7 billion. Assets in its defined contribution plan are $11.4 million.

Equity managers: Domestic — Argus; Barrow, Hanley; Concord Capital; Denver Investment; Dreman; Lazard Freres; Loomis, Sayles; T. Rowe Price; and Wells Fargo.

Fixed-income managers: Domestic — Criterion; Loomis; J.P. Morgan; and STW.

Real estate managers: AEW: Goldman, Sachs; Metropolitan Life; RREEF; and TCW.

The master trustee is Boston Safe.

Charles Stephens, director of investments, oversees the investment management of the fund.

United Nations Joint Staff Pension Fund

	($ millions)
Total assets	8,414
Defined benefit	8,414
Employer DB contributions	300
Benefit payments	450
Internally managed assets	8,414
Defined benefit asset mix:	
Stocks	43%
Fixed income	36.5%
Cash equivalents	9%
Real estate equity	11.5%

NEW YORK — As of Sept. 30, the United Nations Joint Staff Pension Fund's total assets increased 17.7% to $8.414 billion from $7.146 billion a year earlier.

The fund is internally managed but also invests in various unnamed real estate pooled vehicles.

The master trustee is the United Nations secretary-general; the global custodian is Fiduciary Trust International, which also provides investment advice.

Key personnel overseeing the investment management of the fund are J. Richard Foran, assistant secretary-general; Pierre Henchoz, chief-investment management service; and Henry Ouma, deputy chief.

United Parcel Service

	($ millions)
Total assets	1,802
Defined benefit	908
Defined contribution	894
Thrift/savings	823
401(k)	71
Employer DB contributions	60
Benefit payments	10
Employer DC contributions	63
Internally managed assets:	
Total DB	35
Total DC	136
Defined benefit asset mix:	
Stocks	40%
Fixed income	25%
Cash equivalents	22%
GICs/BICs	9%
Other	4
Defined contribution asset mix:	
Company stock	8%
Other stock	15%
Fixed income	23%
Cash equivalents	21%
GICs/BICs	24%
Other	9%

GREENWICH, Conn. — As of Sept. 30, United Parcel Service's total employee benefit assets increased 24.9% to $1.802 billion from $1.443 billion a year earlier. Defined benefit assets increased 27% during the same period, to $908 million from $715 million. Defined contribution assets increased 22.8%, to $894 million from $728 million.

Managers: Domestic — Sanford C. Bernstein; Connecticut National; Equitable; First Fidelity; Mitchell Hutchins; and J.P. Morgan.

The master trustee is Bankers Trust.

Key personnel overseeing the investment management of the fund are Robert Markmann, investments manager, and Bruce Bissell, investments supervisor.

Managers scorecard: Feb. 5.

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United Technologies Corp.

	($ millions)
Total assets	8,261
Defined benefit	6,005
Defined contribution	2,256
Other	2,256

Hedging devices used:
- Stock options
- Bond options
- Stock index futures
- Fixed-income futures

HARTFORD, Conn. — As of Sept. 30, United Technologies Corp.'s total employee benefit assets increased 18% to $8.261 billion from $7 billion a year earlier.

The company's defined benefit assets increased 13.3% during the same period, to $6.005 billion from $5.3 billion. Assets in its defined contribution plan increased 31%, to $2.256 billion from $1.7 billion.

The master trustee and global custodian is Citibank.

Key personnel overseeing the investment management of the fund are F.M. Hawk, assistant treasurer; M.J. Vrissis, manager-pension investments; and R.J. Cepelak, manager-pension investments.

U S WEST Inc.

	($ millions)
Total assets	9,800
Defined benefit	8,100
Defined contribution	1,700
401(k)	1,500
ESOP	200
Employer DB contributions	0
Benefit payments	330
Employer DC contributions	63
Internally managed assets:	
Total DB	1,400
Defined benefit asset mix:	
Stocks	45%
Fixed income	34%
Cash equivalents	10%
Real estate equity	8%
Venture capital	3%
Defined contribution asset mix:	
Company stock	60%
Other stock	13%
GICs/BICs	21%
Other	6%

ENGLEWOOD, Colo. — As of Sept. 30, U S WEST Inc.'s total employee benefit assets increased 20.5% to $9.8 billion from $8.133 billion a year earlier.

Defined benefit assets increased 16.6% during the same period, to $8.1 billion from $6.949 billion. Assets in its defined contribution plans increased 43.6%, to $1.7 billion from $1.184 billion.

The master trustee and global custodian is Boston Safe Deposit and Trust.

USX Corp.

	($ millions)
Total assets	9,825
Defined benefit	9,500
Defined contribution	325
Employer DB contributions	0
Benefit payments	964
Employer DC contributions	20
Internally managed assets:	
Total DB	9,500
Total DC	200
Defined benefit asset mix:	
Stocks	58%
Fixed income	25%
Cash equivalents	14%
Real estate equity	3%
Defined contribution asset mix:	
Company stock	50%
Other stock	3%
Fixed income	12%
GICs/BICs	35%

PITTSBURGH — As of Sept. 30, USX Corp.'s total employee benefit assets increased 10.9% to $9.825 billion from $8.86 billion a year earlier. Defined benefit assets increased 11.1% during the same period, to $9.5 billion from $8.55 billion. Defined contribution assets increased 4.8%, to $325 million from $310 million.

The trustees are J.P. Morgan and U.S. Trust; the global custodian is J.P. Morgan.

Key personnel overseeing the investment management of the fund are Gary A. Glynn, president, and Peter C. Lincoln, vice president-investments, both of U.S. Steel & Carnegie Pension Fund.

Utah State Retirement Fund

	($ millions)
Total assets	3,908
Defined benefit	3,908
Employer DB contributions	137
Benefit payments	122
Internally managed assets:	
Total DB	2,380
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	46%
Fixed income	35%
Cash equivalents	10%
Real estate equity	6%
Mortgages	1%
Other	2%

SALT LAKE CITY, Utah — As of Sept. 30, total employee benefit assets of the Utah State Retirement Fund increased 21.9% to $3.908 billion from $3.19 billion a year earlier. All assets are defined benefit.

Equity managers: Domestic — Atalanta/Sosonoff; Dimensional Fund; Smoot, Miller & Cheney; and Value Line.

International — Baring and State Street Bank.

Real estate manager: F.I.A.

Investment management consultants are SEI and Mercer Meidinger Hansen.

Key personnel overseeing the investment management of the fund are W. Dan Smith, investment officer, and Richard Cherry, assistant investment officer.

Pensions & Investments welcomes letters to the editor. Letters should include name, address and the company of the writer.

The editors reserve the right to edit any letter for reasons of space or clarity.

V

Virginia Supplemental Retirement System

	($ millions)
Total assets	10,244
Defined benefit	10,244
Employer DB contributions	733
Benefit payments	348
Internally managed assets	1,487
Hedging devices used:	
Stock options	
Bond options	
Stock index futures	
Fixed-income futures	
Defined benefit asset mix:	
Stocks	54.5%
Fixed income	21.8%
Cash equivalents	18%
Real estate equity	5.7%

RICHMOND, Va. — As of Sept. 30, Virginia Supplemental Retirement System's assets increased 27.4% to $10.244 billion from $8.041 billion a year earlier. All assets are in defined benefit plans.

Managers: Ardsley Partners; Bankers Trust; Sanford C. Bernstein; Concord Capital; Corinthian Capital; Delaware Investment Advisors; Equitable; Fidelity Management; GAMCO; Hutson; IDS Advisory; Jundt/Capen; LaSalle Advisors; Lehman Management; Lincoln Capital; Loomis, Sayles; MacKay-Shields; Massachusetts Financial; Mellon Capital; Merganser; Metropolitan Life; Miller, Anderson & Sherrerd; J.P Morgan; New England; Nicholas-Applegate; Pacific Financial; The Phoenix; Prudential; Rosenberg Institutional; Security Capital; Donald Smith; and Sovran.

The master custodian is Boston Safe Deposit; the investment consultants

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are Rogers, Casey and Pension Consulting Alliance.

Key personnel overseeing the investment management of the fund are are Timothy R. Barron, director-investments, and Mary Cahill and Malcolm West, deputy directors-investments.

W

Washington State Investment Board

	($ millions)
Total assets	12,660
Defined benefit	12,660
Internally managed assets:	
Total DB	6,743
Hedging devices used:	
Stock options	
Stock index futures	
Defined benefit asset mix:	
Stocks	29.8%
Fixed income	32.8%
Cash equivalents	9.1%
Real estate equity	9.7%
Mortgages	1.7%
Other	16.9%

OLYMPIA, Wash. — As of Sept. 30, the Washington State Investment Board's total employee benefit assets increased 16.5% to $12.66 billion from $10.867 billion a year earlier. All are defined benefit assets.

Equity managers: Domestic — Columbia; Hotchkis and Wiley; Lord, Abbett; Mellon Capital; Smith & Co.; United Capital; and Wells Fargo.

The custodian is Bank of New York; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are David Weig, executive director; Greg Baarson, deputy director; and Marc Fovinci, senior investment officer.

Westinghouse Electric Co.

	($ millions)
Total assets	5,828
Defined benefit	4,007
Defined contribution	1,821
401(k)	1,821
Employer DB contributions	176
Benefit payments	406
Employer DC contributions	59
Internally managed assets:	
Total DB	1,633
Defined benefit asset mix:	
Stocks	57.2%
Fixed income	24.9%
Cash equivalents	1.3%
Real estate equity	12.9%
Mortgages	3.7%
Defined contribution asset mix:	
Company stock	15%
Fixed income	5%
GICs/BICs	80%

PITTSBURGH — As of Sept. 30, Westinghouse Electric Co.'s total employee benefit assets increased 21.4% to $5.828 billion from $4.8 billion a year earlier. Defined benefit assets increased 8.3% during the same period, to $4.007 billion from $3.7 billion. Assets in a 401(k) plan increased 66% to $1.821 billion from $1.1 billion.

The master trustees are Mellon Bank and Pittsburgh National Bank; the global custodian is State Street Bank & Trust; the investment consultant is Wilshire Associates.

Key personnel overseeing the investment management of the fund are Thomas G. Scannell, director, and Joanne Welsh, manager.

State of Wisconsin Investment Board

	($ millions)
Total assets	20,033
Defined benefit	20,033
Employer DB contributions	600
Benefit payments	450
Internally managed assets	20,033
Hedging devices used:	
Stock options	
Bond options	
Fixed-income futures	
Defined benefit asset mix:	
Equities	56%
Fixed income	35%
Cash equivalents	6%
Real estate equity	2.5%
Mortgages	0.5%

MADISON, Wis. — As of Sept. 30, the State of Wisconsin Investment Board's total employee benefit assets increased 22% to $20.033 billion from $16.419 billion a year earlier.

All assets are in an internally managed defined benefit plan.

The master trustee is Morgan Guaranty; the global custodian is Northern Trust.

Key personnel overseeing the investment management of the fund are Patricia Lipton, executive director, and James Severance, assistant executive director.

The International Bank for Reconstruction and Development (World Bank)

	($ millions)
Total assets	3,292
Defined benefit	3,292
Employer DB contributions	42
Benefit payments	55
Hedging devices used:	
Stock options	
Defined benefit asset mix:	
Stocks	51.2%
Fixed income	31.9%
Cash equivalents	8.2%
Real estate equity	5.7%
Other	3%

WASHINGTON — As of Sept. 30, total employee benefit assets of the International Bank for Reconstruction and Development (The World Bank) increased 22.5% to $3.292 billion from $2.687 billion a year earlier. All assets are defined benefit.

The master trustee is State Street Bank; the global custodian is Northern Trust; the investment consultant is Strategic Investment Partners.

Key personnel overseeing the investment management of the fund are Nestor V. Santiago, pension plan administrator; Kelda J. Caldwell, pension investment unit chief; and Anthony Albert, pension investment control officer.

X

Xerox Corp.

	($ millions)
Total asset	3,405
Defined benefit	214
Defined contribution	3,191
Profit-sharing	3,191
Employer DC contributions	101
Hedging devices used:	
Stock index futures	
Defined benefit asset mix:	
Stocks	51.2%
Fixed income	24.2%
Cash equivalents	15.9%
Real estate equity	7.1%
Other	1.6%
Defined contribution asset mix:	
Other stock	50.1%
Fixed income	6.6%
Cash equivalents	12.4%
GICs/BICs	21.7%
Other	9.2%

STAMFORD, Conn. — As of Sept. 30, Xerox Corp.'s total employee benefit assets increased 25% to $3.405 billion from $2.724 billion a year earlier.

The master trustee and global custodian is State Street Bank; the investment consultants are Frank Russell and Collins Associates.

Key personnel overseeing the investment management of the fund are Robert R. Evans, assistant treasurer; Gerard J. Paolini, manager-trust investment strategy; Jainel M. Buell, manager-trust investments; and Toni S. Hanna, trust investment analyst.

The special report in *Pensions & Investments'* June 25 issue will be a directory of international and global investment management firms.

Federal fund sits in cash

Congress, participants set strategy

By Joel Chernoff

WASHINGTON — Thirty-three months after cranking up investment operations, the $5 billion Federal Retirement Thrift Investment Board still has 98.6% of its assets in cash equivalents.

While that would be cause for alarm for most retirement plans, there is a good explanation for the investment policy. A combination of severe constraints on the plan's investment activities and conservatism by participants has conspired to keep the vast majority of the fund's assets in a pool of special Treasury securities that is reinvested daily by the plan's staff.

Wells Fargo Investment Advisors, the fund's sole external manager, is running only $51 million in a stock index fund and $18 million in a bond index fund, both in commingled pools, after two years.

As for most index funds, the fees for those accounts are extremely low. In 1988, the first year some thrift-plan participants were able to direct part of their contribution to the stock and bond funds, Wells Fargo picked up only about a paltry $900 in management fees on the accounts. Assets in those funds had grown to $11.7 million by the end of 1988, from zero at the year's start.

Fee revenue for 1989 was not available.

The promise, of course, is in the plan's projected growth — it is expected to grow to between $40 billion and $50 billion by the end of the century, and eventually become the nation's largest retirement plan, said Francis X. Cavanaugh, the thrift plan's executive director. In fact, the plan just crossed the $5 billion threshold this month, up from $4.3 billion as of Sept. 30.

Presently, however, severe restrictions remain on how assets can be invested. Some rules will be lifted over time, but a few are scheduled to continue until 1997.

There is a ray of hope: Pending legislation, expected to be passed by Congress early this year, will significantly lift many of those restrictions, freeing up more assets that could be invested in stocks and bonds.

The investment restrictions stem from the complex nature of the thrift plan. Created by Congress in 1986, it was part of an overhaul of the federal retirement system. Most federal employees hired after Jan. 1, 1984 automatically were included in the defined contribution plan, but participants in the old Civil Service Retirement System also were permitted to participate (425,000 of the plan's 1.5 million members are active members of the old system).

But any contributions they make to the thrift plan are restricted to the plan's G Fund, which is invested solely in special, non-marketable Treasuries. Those Treasuries yield the average rate of outstanding Treasury securities with maturities of four or more years.

The 876,000 participants in the new Federal Employees' Retirement System automatically participate in the thrift plan, and the government contributes 1% of their pay to the plan. But those assets also must be invested in the G Fund.

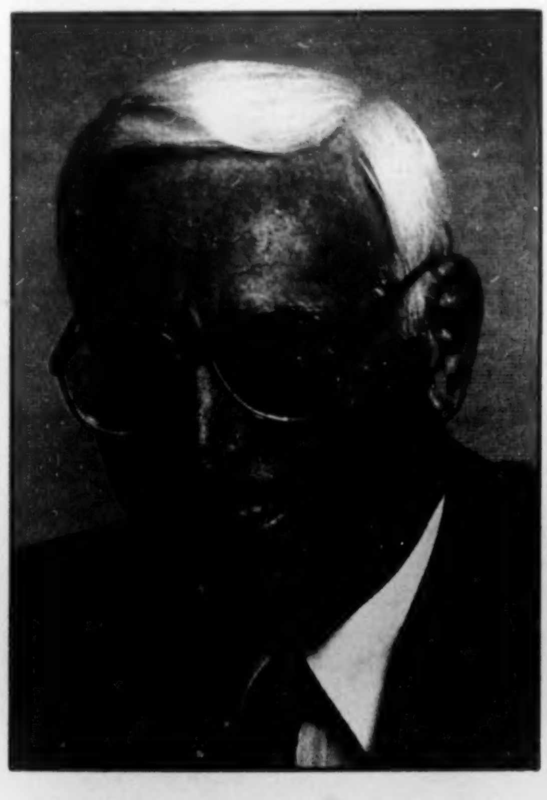
Further restrictions apply to voluntary contributions now made by about half of the retirement system's participants. In 1988, those participants could direct only up to 20% of their contributions to the plans's two other investment options: the C Fund, an equity fund that tracks the Standard & Poor's 500 Stock Index, and the F Fund, a fixed-income fund that tracks the Shearson Lehman Hutton Government/Corporate Bond Index.

For assets contributed in 1989, up to 40% could be directed to the stock and bond funds. The restrictions on new contributions phase out by 1992, but remain in place for old assets through 1997, creating a recordkeeping nightmare the thrift board would like to eliminate.

As of Sept. 30, 1.1% of the thrift plan's assets were invested in the stock fund and 0.3% in the bond fund. That's a significant increase from the year before, when only 0.2% of assets were invested in stocks and 0.1% in bonds.

About 26% of those eligible to direct assets invest in stocks, Mr. Cavanaugh said. "They're getting used to it."

Direction by thrift-plan participants into stocks and bonds is similar to that seen in private-sector plans, he said, noting that most participants prefer investments that do not bear principal risk, such as guaranteed investment contracts.


Francis Cavanaugh expects the conservative strategies to ebb.

Government matches of participant contributions face still tougher rules. The federal government matches contributions by participants dollar for dollar up to their first 3% of pay, and 50 cents on the dollar for additional amounts up to 5% of deferred pay.

But the government matches must be invested in the G Fund, until investment restrictions gradually are phased out between 1993 and 1997.

Bipartisan legislation — H.R. 2514 and its companion, S. 1354 — would eliminate investment restrictions on contributions, except for money contributed by CSRS participants. If Congress approves the measure in the first half of this year, the thrift plan likely will be able to eliminate restrictions on those assets by January 1991, Mr. Cavanaugh said.

That could lead to a significant shift into stocks and bonds and out of the special Treasuries. In addition, as new employees join the federal government — eventually making up its entire roll of 3 million employees — they will have discretion of a rapidly growing pool of assets.

Still, there are no promises that Wells Fargo will reap the benefit of such a shift: The firm's three-year contract expires at the end of this year, and the thrift plan will issue a request for proposals around midyear. Mr. Cavanaugh, however, expressed satisfaction with the money manager. ■

Foreign

Continued from page 16

but doesn't expect to do so internationally until the Japanese market — the world's largest in capitalization — appears more attractive in its stock valuations.

As its first international commitment — excluding previous holdings of Canadian bonds and occasional purchases of American depository receipts in the past — the Wisconsin Investment Board, Madison, made a substantial first commitment of $705 million. Even so, that amount weighed in at less than 4% of assets of the $20.033 billion the fund reported as of Sept. 30.

Wisconsin's approach to foreign investing is deliberate and careful, said Patricia Lipton, the fund's executive director. Gradually moving toward an international exposure of 10% of total equities and 10% of bonds, Wisconsin is phasing in foreign equity investments over five years and foreign bond allocations over three years. As of Sept. 30, the fund had 56% in equities and 35% in fixed income.

The fund, which otherwise manages its assets in-house, is using a combination of in-house and external money managers for its foreign investments. According to Ms. Lipton, no timetable has been set for deciding if or when the fund will manage all international assets in-house.

Similar to most pension fund sponsors, Ms. Lipton cited a desire for diversification and enhanced returns as main motives for investing abroad.

She also pointed to the contribution foreign investing and awareness of foreign economies and markets make to investing domestically.

"You can't understand the domestic market without knowing what goes on internationally," she said.

Even so, few jumbo funds matched Wisconsin's foreign allocation; in fact, several funds bucked the overall growth trend.

Among the employee benefit funds reporting smaller international holdings as of Sept. 30, 1989, than they had reported a year earlier are E.I. du Pont de Nemours & Co., the State Universities Retirement System of Illinois; Allied-Signal Inc.; Sears, Roebuck & Co.; North Carolina Department of State Treasurer; Aluminum Co. of America; Chevron Corp.; and American Stores Co. ■

Managers

Continued from page 15

ranking in the asset classes, however, reflects the number of pension funds using them only in that class.

Most of the managers that ranked high in this survey also did so in 1988. There was some shifting within the rankings and some slight changes in the number of accounts listed. These shifts, however, could be due to the movement of some pension funds into or out of the Top 200.

What distinguishes the 10 most frequently mentioned managers seemed to be the multiple product lines they offer.

"They're all big," said Roger Bransford, national manager-asset consulting at TPF&C, commenting on the 10 most frequently cited managers. "Part of it is the ability to apply resources in efficient management, and part of it is the ability to diversify into multiple areas," he said.

In addition to ranking No. 1 overall, J.P. Morgan ranked second in fixed income, with 24 mentions, and third among international managers, with 12 mentions. The driving force behind Morgan's growth and loyal client following has been the breadth of its product lines, said David Brigham, managing director.

"Our growth as been pretty broad based," Mr. Brigham said, and has come from areas including real estate, structured investments and international. "People are very much interested in international, fixed as well as equity, and currency has taken on a lot of interest among our clients," he said.

International, however, is one sector among many generating growth, Mr. Brigham emphasized. Generally, clients seek out Morgan for its active, value-added approach, he said. "A lot of it is problem solving," and tailoring investments to a client's particular needs, Mr. Brigham said.

Pacific Investment Management Co., Newport Beach, Calif., ranked No. 1 among fixed-income managers with 27 mentions. Officials there could not be reached for comment by press time.

Loomis, Sayles & Co. Inc., Boston, an active fixed-income manager with a broad range of investment styles decentralized throughout its regional offices, followed in third place with 14 mentions. Criterion Investment Management Co., Houston, which uses a proprietary computerized system to evaluate and monitor risk for individual bonds and bond portfolios, ranked fourth with 13 mentions.

Miller, Anderson & Sherrerd, Bala Cynwyd, Pa., an active manager using sector analysis, and Wells Fargo, the largest of the fixed-income indexers, tied for fifth place, with 12 mentions each.

Wells Fargo was the top equity manager with 30 mentions, and tallied 10 mentions among international managers. Wells Fargo is the largest index fund manager in all areas — domestic, international, equity and fixed income.

Principals at both Wells Fargo and Alliance Capital Management L.P., New York, which ranked second among equity managers and ninth overall, said passive investment strategies have been fueling their growth in recent years, as funds shift their investments into passively managed cores that use specialized or active strategies to enhance them.

"Our passive business has grown more rapidly than our traditional active equity business," said Dave H. Williams, chairman at Alliance. The shift away from active to passive strategies has also been accompanied by an interest in more specialized investment services, including indexing international securities, Mr. Williams said.

Concern over high management fees has partly led to the move to passive management, Mr. Williams said. "It's very importantly cost-driven," he said. "Price cutting in our industry seems to take the form of shifting funds toward passive" investment strategies, he added.

Mellon Bank and Bankers Trust Co. ranked third and fourth among equity managers, with 23 and 20 mentions, respectively. Bankers Trust also has a large fixed-income capability and received eight mentions. Overall, Bankers Trust ranked seventh. It also was the top master trustee/custodian with 33 mentions.

Growth at Bankers Trust has come from cash management, international, active value equity and indexing as well as bank investment contract operations, said Michael Fisher, senior vice president. Although Bankers Trust is the second-largest indexing manager with $40.8 billion, it is on BICs that the firm has placed its bets for the 1990s, Mr. Fisher said.

"In the world of fixed-income management, (BICs) are a major part of our thrust over the years ahead," he said. "There clearly has arisen a need for credit risk analysis, that people just a few years ago would not have thought about at all."

While the investment management operations of major banks were not always perceived as favorably as they are today, being able to offer a wide array of investment products has spurred growth in the industry overall, Mr. Fisher added.

Capital Guardian Trust Co., Los Angeles, and Loomis, Sayles tied for fifth among managers in the equity sector with 16 mentions each.

International investing has been a major growth area, managers agreed. State Street Bank and Trust Co. was most No. 1 with 15 mentions. State Street managed more than $10 billion in assets internationally, as of Dec. 31, up 33% from $7.5 billion a year earlier, said Nicholas Lopardo, senior vice president and chief investment officer-asset management.

Most of the growth State Street has enjoyed in the past year has come from the international sector, Mr. Lopardo said. Of the 47 new clients that State Street added in 1989, 55% to 65% made international investments, he said.

Capital Guardian Trust ranked second among international managers with 14 mentions, and J.P Morgan followed with 12 mentions. Baring International Investment, Ltd., London, had 11 mentions. Brinson Partners Inc., Chicago, and Morgan Grenfell Investment Services Ltd., London, tied for fifth place with 10 mentions each.

Among real estate managers, The RREEF Funds, San Francisco, Calif., was No. 1 with 76 mentions. JMB Institutional Realty, Chicago, and Equitable followed with 34 and 33 mentions, respectively. Prudential ranked fourth with 27 mentions, and Aetna Life Insurance Co. ranked fifth with 24 mentions. ■

Top consultants

	Times mentioned
Frank Russell	18
SEI	13
Wilshire	11
Callan	10
Rogers, Casey	6

Top master trustees/custodians

	Times mentioned
Bankers Trust	33
Boston Safe	19
Northern Trust	18
State Street	17
Mellon Bank	12
Bank of New York	11
Chase	10
Citibank	6
Continental Bank	5
Harris Trust	5
Security Pacific	5

Top global custodians

	Times mentioned
Chase	16
State Street	15
Bankers Trust	13
Boston Safe	13
Northern Trust	10

Oregon mulling tax on pension benefits

SALEM, Ore. — Oregon voters this year will decide whether a state law on the taxation of public pension benefits will stand.

Last year, the state Legislature passed a measure requiring equal taxation of state and federal retirees' benefits, but increased state benefits to offset the tax.

Previously, state pensions had not been subject to state income tax, said Elizabeth Stockdale, attorney in charge of the tax section at the state Department of Justice.

The law was changed to bring the state into compliance with a U.S. Supreme Court decision, she said.

In that decision, Davis vs. Michigan, the court held Michigan was discriminating unlawfully on the basis of compensation by exempting state, but not federal, pensions from taxation. The decision came down at the end of March.

A body of case law, however, suggests the level of pension benefits may be considered a contractual right, Ms. Stockdale said.

Although taxing these benefits may not actually be breaking such a contract, the Legislature decided to protect itself from such accusations by increasing state benefits.

The increase aroused opposition from federal employees in Oregon, and has led to the referendum. Oregon residents may put any state law to a vote if they collect sufficient signatures on petitions. About 62,000 were collected for this referendum, far more than the roughly 42,000 required.

The vote will come in November. If voters approve the new law, it will apply to both the 1989 and 1990 tax years.

Also, Ms. Stockdale said, the Legislature has set up a task force to take a more extensive look at how all pension benefits, public and private, are taxed. ■

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Real estate

Continued from page 15

cash.

The more typical corporate approach to real estate has been that of the Owens-Illinois Inc. pension fund, Toledo, Ohio, which had $199.8 million in real estate, $6.6 million more than the $193.2 million the company reported a year earlier.

What looks like an increase is actually a drop when adjusted for normal appreciation, the result of sales of a small number of maturing properties.

One reason Owens-Illinois isn't putting more money in real estate, said Ronald C. Boller, vice president and director of benefit finance, is that he — like many other corporate pension officers — is concerned about the returns from real estate relative to other asset classes.

Investors, he said, talk about the vacancy rate for office buildings at being about 15% nationally. But, he said, when you consider the "economic vacancy rate" the actual vacancy is about twice the 15% figure.

The reasons that the number doubles, he said, is because office landlords are offering free rent and rent concessions, such as modifications to buildings to suit tenant needs, which detracts from the building's income.

Some plans, however, are allocating assets to realty because they believe real estate is the most undervalued asset class. But at this point, he said, that is not the view of real estate at his company, and his plan didn't invest any significant dollars in real estate in 1989.

"I think the plans that are putting money into real estate are the plans that have a target allocation for real estate and aren't there yet," said Mr. Boller.

Those employee benefit funds that did sharply increase dollar allocations to real estate were the public plans, which started investing in real estate after corporate funds.

Public funds also are still generally underfunded and are receiving larger employer contributions than corporate funds.

The $19.3 billion Ohio Public Employees' Retirement System, Columbus, increased its investment in real estate to $646 million from $368 million a year earlier.

But Ray McLaughlin, executive director, said his fund is growing so large that even with the increase, his plan has only about 3% of assets in equity real estate currently. The investment looks large until you look at the size of the total fund, he said.

His fund, he said, really didn't begin investing in some types of real estate until 1986. "We are still very negative on real estate," he said, but there are some types — such as apartments and small properties like strip shopping centers — that could generate good cash flow.

Those property classes are where the fund is making most of its investment, Mr. McLaughlin said.

Another public fund, the $11.178 billion Oregon Public Employes Retirement System, Salem, increased its real estate investment to $470 million from $375 million.

But James C. George, investment manager, like Mr. Dootson and Mr. Boller, said total fund assets have increased so much real estate investment is only 4.5% of assets.

The fund is making only a "gradual" commitment to the "troubled" asset class where there is a surplus of product, he added.

While he wants his fund to have a 10% allocation to real estate, it might take the fund 10 years to do so, he said. ■

Bottom 800 defined contribution asset mix

	1989
Aggregate	
Domestic stock	18.6%
Company stock	23.0
Domestic fixed income	10.9
Cash	6.8
Real estate equity	0.6
Mortgages	0.1
Annuities	0.9
GIC/BIC	36.9
Int'l equity	0.3
Int'l fixed income	0.0
Venture capital	0.0
Oil/gas	0.0
LBOs	0.0
Private placements	0.0
Other	1.9
Corporate	
Domestic stock	18.8%
Company stock	26.2
Domestic fixed income	7.9
Cash	5.8
Real estate equity	0.6
Mortgages	0.0
Annuities	0.1
GIC/BIC	38.7
Int'l equity	0.3
Int'l fixed income	0.0
Venture capital	0.0
Oil/gas	0.0
LBOs	0.0
Private placements	0.0
Other	1.6
Public	
Domestic stock	28.0%
Domestic fixed income	21.1
Cash	10.4
Real estate equity	1.0
Mortgages	0.8
Annuities	3.9
GIC/BIC	28.0
Int'l equity	0.0
Int'l fixed income	0.0
Venture capital	0.1
Oil/gas	0.0
LBOs	0.0
Private placements	0.2
Other	6.5
Union	
Domestic stock	13.4%
Domestic fixed income	43.5
Cash	19.7
Real estate equity	0.9
Mortgages	0.4
Annuities	13.3
GIC/BIC	8.5
Int'l equity	0.0
Int'l fixed income	0.0
Venture capital	0.0
Oil/gas	0.0
LBOs	0.0
Private placements	0.0
Other	0.3

Top 200 defined contribution average asset mix

	1989
Corporate	
Company stock	28.7%
Other stock	17.1
Fixed income	10.0
Cash	5.7
GIC/BIC	35.7
Annuities	0.0
Other	2.8
Public	
Stocks	25.0
Fixed income	63.0
Cash	5.0
GIC/BIC	2.9
Annuities	0.0
Other	4.1
Union	
Stocks	15.3
Fixed income	19.3
Cash	53.4
GIC/BIC	7.3
Annuities	0.0
Other	4.7

Top 200 defined benefit average asset mix

	1989	1988
Corporate		
Stocks	50.2%	48.6%
Fixed income*	32.6	31.4
Cash	7.3	9.0
Real estate equity	4.5	5.1
Mortgages	0.3	0.3
GIC/BIC	1.2	2.4
Annuities	1.3	1.2
Other	2.6	2.0
Public		
Stocks	37.2%	35.2%
Fixed income*	44.9	47.6
Cash	9.0	9.7
Real estate equity	3.8	3.4
Mortgages	2.4	2.4
GIC/BIC	0.2	0.5
Annuities	0.0	0.0
Other	2.5	1.2
Union		
Stocks	41.9%	34.6%
Fixed income*	44.4	46.4
Cash	5.7	8.8
Real estate equity	3.3	3.4
Mortgages	2.1	2.1
GIC/BIC	2.1	2.2
Annuities	0.0	2.0
Other	0.5	0.5

*Includes mortgage-backed securities

PBGC may revamp investment policies

By Joel Chernoff

WASHINGTON — The Pension Benefit Guaranty Corp. is about two months away from receiving an asset allocation study that might lead to an overhaul of the investment of its $2.55 billion in assets.

James B. Lockhart III, the agency's executive director, has pointed to investment strategy as one area in which he hopes to improve the agency's operations.

Meanwhile, the PBGC's combined assets returned 19.6% for the year ended Sept. 30, bringing in some $400 million in investment income, compared with only about $5 million the previous year.

Combined with $600 million in income from premiums paid by employers — but offset by $330 million in benefit payments — the agency was able to make a significant dent in its $1.5 billion deficit.

The agency also paid out $320 million in benefits to LTV Steel retirees from three troubled LTV pension plans and PBGC assets. The PBGC is trying to restore those plans to The LTV Corp.; the Supreme Court is scheduled to hear oral arguments on the case on Feb. 27.

The precise size of the PBGC's current deficit is not yet available and will reflect the influence of various accounting rules.

Consultants Wilshire Associates Inc., Santa Monica, Calif., and Goldman, Sachs & Co., New York, are evaluating the agency's asset and liability structure.

See **PBGC** *on page 69*

Bottom 800 defined benefit asset mix

	1989	1988
Aggregate		
Domestic stock	44.3%	41.70%
Domestic fixed income*	31.2	32.80
Cash	9.3	11.30
Real estate equity	4.0	4.10
Mortgages	1.1	0.80
GIC/BIC	4.1	4.90
Private placements	0.1	0.10
Annuities	0.7	0.60
International	3.2	2.10
Venture capital	0.4	0.40
Oil/gas	0.1	0.04
LBOs	0.1	0.03
Other	1.4	1.13
Corporate		
Domestic stock	47.5%	46.30%
Domestic fixed income*	27.0	26.60
Cash	9.4	11.40
Real estate equity	4.2	4.10
Mortgages	0.4	0.30
GIC/BIC	4.3	5.80
Private placements	0.1	0.10
Annuities	0.8	0.80
International	4.1	2.90
Venture capital	0.6	0.60
Oil/gas	0.1	0.06
LBOs	0.1	0.05
Other	1.4	0.99
Public		
Domestic stock	39.0%	36.50%
Domestic fixed income*	41.0	44.40
Cash	8.3	10.70
Real estate equity	3.8	4.00
Mortgages	2.1	0.90
GIC/BIC	1.8	0.90
Private placements	0.2	0.01
Annuities	0.2	0.30
International	2.0	1.00
Venture capital	0.3	0.20
Oil/gas	0.0	0.01
LBOs	0.0	0.00
Other	1.3	1.08
Union		
Domestic stock	34.6%	29.90%
Domestic fixed income*	35.8	39.80
Cash	11.9	12.00
Real estate equity	3.3	4.70
Mortgages	3.3	2.60
GIC/BIC	8.2	8.10
Private placements	0.1	0.20
Annuities	1.0	0.06
International	0.1	0.30
Venture capital	0.1	0.10
Oil/gas	0.0	0.02
LBOs	0.0	0.00
Other	1.6	2.22

*Includes mortgage-backed securities

Pacific Gas & Electric Co.

SAN FRANCISCO — Pacific Gas & Electric Co. hired PRIMCO Capital Management Inc., Louisville, Ky., to manage the guaranteed investment contract portion of its $1.2 billion defined contribution plan.

GICs account for approximately 3% of the defined contribution plan, according to Sunny Oberoi, director-investments and benefit finance. Approximately 90% of the plan's assets are invested in company stock, he said. The remainder is in other investment options.

Previously, GIC investments were handled internally. Pacific Gas & Electric decided to hire an outside manager after deciding to move from a fixed option to a blended GIC.

The fund also recently hired Bankers Trust Co. — Investment Management Group, New York, to manage $220 million in passive equities.

Bankers Trust will manage two passive portfolios. A $100 million international portfolio will track the Morgan Stanley Capital International Europe Australia Far East Index; a $120 million domestic portfolio will track the Russell 2500 Index.

The change was made in order to achieve a strategy of more passive management, according to Mr. Oberoi. To fund Bankers Trust, three active managers were terminated The company declined to name.

The overall asset mix of the fund is now approximately 58% domestic equity, 12% non-U.S. equity, 10% real estate and 20% fixed income.

Frank Russell Co., Tacoma, Wash., helped in the search.

Kansas Gas & Electric Co.

WICHITA, Kan. — Kansas Gas & Electric Co. hired Fidelity Management Trust Co., Boston, to manage a $31 million immunized bond portfolio for its $103 million defined benefit pension plan.

Bruce Burns, manager-investor relations, said the immunized portfolio will use a structured approach to provide an "enhanced return" to help match cash flow with liabilities associated with retired lives.

Wilshire Associates, Santa Monica, assisted in the search, he said.

Mr. Burns said assets for the immunization will come from a $37 million fixed-income portfolio that had been managed by Criterion Investment Management Co., Houston, which was terminated. He said the utility will conduct a search to place the remaining $6 million.

Kansas Public Employees

TOPEKA, Kan. — The $3.7 billion Kansas Public Employees Retirement System hired Wells Fargo Investment Advisors, San Francisco, to run a $200 million South Africa-free, bank-free index fund.

Marshall Crowther, executive director of Kansas fund, said the move was made because the firm decided to go into indexing as a core. The state has bans on investing in companies doing business in South Africa and banks.

The Kansas fund terminated Capital Supervisors Inc., Chicago. The firm ran more than $200 million in an active equity strategy since 1971.

The remaining amount will be added to the domestic fixed-income portfolio run by the Boston office of Loomis, Sayles & Co. Mr. Crowther said the addition brings the weighting of the domestic fixed investments up to allocation targets.

Illinois Teachers Retirement

SPRINGFIELD, Ill. — The $8.5 billion Illinois Teachers' Retirement System has committed $50 million as the sole limited partner in a new venture capital fund managed by Weiss, Peck & Greer, New York, said William M. Stephens, chief investment officer.

Weiss, Peck & Greer also is raising another fund that will invest side by side with the Illinois fund. The side-by-side fund, which will be capped at $50 million, already has about $30 million in commitments and likely will close by the end of February, said Philip Greer, managing general partner.

Because the fund hasn't closed yet, he declined to identify the investors, but said they include pension funds, endowments, insurance companies and individuals.

Weiss, Peck & Greer will focus on start-up companies, with an occasional investment in a company at a more advanced stage of development, Mr. Greer said. Industry preferences include electronics, computer hardware and software, biotechnology and service businesses.

University of Santa Clara

SANTA CLARA, Calif. — The $95 million University of Santa Clara Endowment Fund, has hired Bankers Trust Co., New York, as its new custodian, replacing Wells Fargo Bank, San Francisco.

It also hired GAMCO Investors Inc., New York, and Fisher Investments, Woodside, Calif., as value-equity managers. GAMCO was given $2.5 million, and Fisher was given $25 million. In addition, the endowment placed $25 million into a long-term bond fund with The Common Fund, Fairfield, Conn.

The assignment of McCullough, Andrews & Cappiello Inc., San Francisco, the endowment's previous sole external adviser, was changed from a balanced manager to an equity-only manager. Assets that had been with the firm were used to fund the new managers.

Ralph H. Beaudoin, vice president for finance and business with the university, said the changes were made for greater diversification.

Southern California Auto Club

LOS ANGELES — The Automobile Club of Southern California's $220 million pension plan made its first international commitment by hiring State Street Bank & Trust Co., Boston, to manage $10 million in a commingled passive Morgan Stanley Capital International Europe Australia Far East account. That foreign allocation represented 5% of the pension fund's total assets.

Assets came from a reduction in several domestic managers' allocations, said Harold C. Mills, treasurer of the fund, who declined to name the managers involved.

State Street was chosen because of its performance "which has been good over the one-, three- and five-year periods," he said.

The fund used DeMarche Associates, Westwood, Kan., as its consultant.

F.W. Woolworth Co.

NEW YORK — The $515 million pension fund of F.W. Woolworth Co. hired Marvin & Palmer Associates Inc. to manage $30 million in international equities, according to Martin Tolep, director-pension asset management.

The plan's asset mix consists of roughly 10% international equities, 30% to 33% domestic equities, 45% to 50% fixed income and the remainder in real estate.

Marvin & Palmer was funded with assets taken from each of Woolworth's domestic managers. According to Mr. Tolep, no managers were terminated.

No consultant was used.

New York City Retirement

NEW YORK — The $45 billion New York City Retirement Systems hired State Street Bank & Trust Co., Boston, as custodian for its short-term assets, said a spokesman for the comptroller's office, which oversees the funds.

State Street will be responsible for trading between $1 billion and $2 billion each day in primarily overnight cash instruments. The spokesman said the search was conducted internally and was precipitated by the resignation of Irving Trust, New York, soon after it was taken over by Bank of New York in 1988.

The spokesman would not give a reason for Irving Trust's resignation or why State Street was chosen.

Denver Employees

DENVER — The $469 million Denver Employees Retirement Plan hired Denver Investment Advisors Inc., Denver, and Neuberger and Berman, New York, to manage $15 million each in intermediate fixed income, said Michael Heitzmann, executive director of the plan.

The fund trimmed some portfolios with other managers to fund the new firms, said Mr. Heitzmann.

Overall, the asset mix of the employees' plan is 45% domestic equities, 40% fixed income, 10% real estate, 3% international equities and 2% cash and miscellaneous.

Segal Advisors Inc. was the consultant.

In addition to the bond manager hires, the fund also plans to hire an international equity manager. According to Mr. Heitzmann, the decision is expected by mid-February. William M. Mercer Meidinger Hansen Inc., Denver, is helping the fund in that search.

Tallahassee Retirement System

TALLAHASSEE, Fla. — The $183 million City of Tallahassee Retirement System has hired Oppenheimer Capital, New York, to run a $25.6 million value-oriented equity portfolio, said Rick Atkinson, deputy treasurer.

Originally, the board had decided to hire Lehman Management Co., New York, to manage the portfolio, but reconsidered after Lehman underwent a management buy-out.

Mr. Atkinson emphasized fund officials still consider Lehman a strong firm but the buy-out "basically introduced an unknown quantity."

The hiring of Oppenheimer was the last piece in a restructuring of the $183 million fund. Officials now are funding contracts for five new equity managers and three new real estate managers with $28 million in cash and assets taken from terminated manager Frank Russell Investment Management Co., Tacoma, Wash., which had run most of the fund's assets for seven years.

The fund now will have nearly $100 million invested in stocks. Besides Oppenheimer, equity managers are Wells Fargo Investment Advisors, San Francisco, for commingled Standard & Poor's 500 Stock Index and extended market index accounts; Eagle Asset Management, St. Petersburg, Fla.; and the Calvert-Ariel Growth Fund, Washington.

Real estate managers, who will invest about $18 million in assets, are J.P. Morgan Investment Management Inc., New York; JMB Institutional Realty Corp., Chicago; and TCW Realty Advisors, Los Angeles.

Massachusetts Mutual Life Insurance Co., Springfield, Mass., runs the remaining $65 million in guaranteed investment contracts that expire in 1993. At that time, the fund will reconsider its fixed-income options.

Consultants on the restructuring were Callan Associates Inc. and William M. Mercer Meidinger Hansen Inc.

Houston Municipal Employees

HOUSTON — The $561 million Houston Retirement System has hired Amerindo U.S. Advisors Inc., Larkspur, Calif., to manage a $10 million equity account, according to Clifford Tuttle, fund administrator.

Mr. Tuttle said the fund was seeking a small-capitalization equity manager and Amerindo was suggested by SEI Corp., the fund's consultant.

Funding will be from cash flow.

Chicago Painters and Decorators

CHICAGO — The Chicago Painters and Decorators Pension Fund hired Strong/Corneliuson Capital Management Inc., Menomonee Falls, Wis., and Chicago Asset Management, Chicago, to manage equities for the fund.

Morley Capital Management Inc., Lake Oswego, Ore., also was hired to manage the guaranteed investment contract portion of the fund, according to Jack Marco, president of Marco Consulting Group, Chicago, and spokesman for the fund.

The two equity managers, as well as Wright Investors' Service, Bridgeport, Conn., a current manager, will each manage approximately $11 million of the $90 million fund. Morley will manage 20% of the fund, as will both current fixed-income managers, Gofen & Glossberg Inc., Chicago and Consistent Asset Management Co., Wilmington, Del.

Rutgers-State University

NEW BRUNSWICK, N.J. — Rutgers-The State University hired Reich & Tang L.P. and Goldman, Sachs Asset Management, both of New York, to manage a portion of its $110 million endowment fund.

Both firms will manage equities. Reich & Tang was allocated $20 million and Goldman Sachs, $10 million, according to Edward Kozack, assistant treasurer of the fund.

The overall asset mix of the fund is 60% equity and 40% fixed income, said Mr. Kozack. The two were funded with assets from a terminated manager that Mr. Kozack declined to name.

Hamilton & Co. Inc., Princeton, N.J., was the consultant.

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More managers list PIPER returns

Editor's note: *The following firms had funds that missed the deadline, were omitted or were in error when listed in the Pensions & Investments' Performance Evaluation Report for periods ended Sept. 30. All figures, except for international returns, are for funds that would have placed in the top quartile of their universe. Information was provided by Robin Stadler of Rogers, Casey & Associates, which compiles PIPER. All figures for periods of more than one year are compound annualized.*

CoreStates Investment Advisers' Equity Growth Fund returned 12.3% for the quarter, 32.9% for the year and 18.3% for the 10-year period.

Transamerica Life Insurance's Fixed-Income Separate Account T-2 returned 14.3% for the year and 16.3% for five years.

Provident Capital Management Inc.'s Special Equity Fund returned 35.1% for the year and 19.8% for 10 years. The firm's International Low P/E Fund returned 17.2% for the quarter and 32.4% for the year. ■

Japan

Continued from page 3

new law: employee funds that use investment advisers and in-house managers must be at least 8 years old; those wishing to manage assets in-house must have a minimum of 50 billion yen, or $342.9 million, in assets; and the minimum account size an investment adviser can manage is 1 billion yen, about $6.85 million — a figure that exceeds the amount of new money "the vast majority of employee pension funds" have in a year, said Mr. Booher.

According to Masanori Tsuno, vice president and business development director of Frank Russell Japan Co., the funds' annual cash flow totals about 1.5 trillion yen to 2 trillion yen, between $10.3 billion and $13.7 billion. For fiscal year 1990, beginning in April, that means perhaps about 100 billion yen, or $686 million, in pension assets would be available for discretionary investment advisers, he estimated.

To be eligible to manage Japanese pension assets, money managers must be licensed by the Ministry of Finance as discretionary investment advisers. So far, 138 firms, including some 40 foreign firms, have obtained such a license. In addition, 17 trust banks and 21 insurance companies now manage Japanese pension assets.

InterSec's Mr. Booher figures competition for pension assets will be hardest on non-Japanese money managers. "If there is a queue for obtaining (such) business . . . it's predictable who'd be in front," he said. "Toward the head of it would be the traditional lending banks; in the middle would be the Japanese securities companies that may have been providing services; and at the end would be the foreigners."

Nor can foreign money managers hope to attract what Mr. Booher calls a "logical target market" — the pension funds of foreign-based companies operating in Japan. Since the majority of these non-Japanese pension funds are tax qualified and not EPFs, the new law does not apply to them.

Chase Investors Management Corp., New York, which has been operating in Japan since 1982, is not trying to attract Japanese pension assets through direct solicitation. For one thing, Chase prefers not to compete with its current Japanese clients, which include trust banks and insurance companies. Chase Investors executives also believe vying for Japanese pension assets would be an expensive proposition — and one that wouldn't adequately tap the firm's forte in dollar-denominated investing. "Some firms will be trying to compete as yen-denominated managers," said Lawrence F. Weber, managing director of Chase Investors Management in New York. "But we don't consider this to be our area of expertise. We are a foreigner in the tightly knit Japanese financial community."

Other managers, however, are not being dissuaded from positioning themselves in Japan. Those taking a long-term view believe, in time, their performances and client services will win over pension funds. In the meantime, they can try to attract alternatives, such as "tokkin" funds, composed of surplus corporate assets.

"Many of the existing managers, insurance companies in particular, have produced fairly low level rates of return and not provided good client services to Japanese pension funds," said Wallace P. Wormley, deputy president and chief investment officer of Prudential Investment Advisory Co. Ltd. in Tokyo. "We believe this provides an opportunity for a firm with a performance and client services orientation to differentiate itself."

He recognizes that attracting Japanese pension business will clearly take time. "In the first five years, we think tokkin and subadvisory business will be the larger part of funds we manage," said Mr. Wormley. "But starting from year five and going forward, we expect our pension assets to pick up as a larger percentage of the total. And maybe in 10 years, we expect that more than 50% of our business (in Japan) will come from Japanese pension funds." ■

Top 200

Continued from page 1

calls. Plan sponsors were requested to provide asset totals, investment mixes and other information for their pension plans as of Sept. 30. Where necessary, those totals were calculated through *P&I* estimates and use of the 1990 Money Market Directory of Pension Funds and their Investment Managers.

The profile section, which includes rankings, stories, tables and individual profiles of the Top 200 funds, begins on page 14.

The strong growth in assets overshadowed another year in which plan sponsor contributions were outpaced by benefit payments, a trend that started last year but accelerated dramatically this year (*see story on page 14*).

Mike Johnston, an actuary and partner with Hewitt Associates, Lincolnshire, Ill., said good market returns, combined with the limitations on deductible contributions to fully funded plans, should keep contributions at a stagnant pace.

"A year of very good market returns will mean contributions will probably be down next year," Mr. Johnston said.

The lower cash flow resulting from reduced contributions leads to more competition among investment managers for defined benefit accounts, sparking fee cutting and the increased use of performance-based fees, said Mark Scott, consultant for Wyatt Asset Services, San Francisco.

He said pension funds remain healthy because of their moves toward diversification and indexation.

Among the assets held by the Top 200 defined benefit plans, the most significant gains were in internal indexed management (*see story on page 14*) and international investments (*see story on page 16*).

Internally managed indexed equity assets grew a whopping 67.6%, to $69.2 billion. Even taking into account the Standard & Poor's 500 Stock Index return of 32.8%, the assets posted a 26.3% real growth rate.

"For one-third of the cost they can invest in-house," Mr. Scott said.

Internally managed fixed-income indexing grew at a stupefying 613%, to $16.4 billion from $2.3 billion a year earlier, and taking into account the Shearson Lehman Hutton Government/Corporate Bond Index return of 11.3%, the assets still grew 540%.

All told, internally managed assets among the Top 200 defined benefit plans grew 15%, to $490.8 billion.

International investing boomed as pension executives attempted to reduce risk through diversification and to join in on the long-term returns.

As of Sept. 30, $39.4 billion is reported invested overseas by the Top 200 defined benefit plans, up 42.8% from the $27.6 billion reported a year earlier.

International equity investments rose 55.7% to $32.7 billion, and adjusted for market growth, still posted a 27.2% gain. International fixed income among the defined benefit plans in the Top 200 rose only 5.2%, to $6.1 billion.

Adjusting for the Salomon Brothers World Government Bond Index return of 6.5%, international fixed income actually showed a slight asset decline of 1.5%.

Other asset classes among the Top 200 that showed significant asset gains, although lessened by market adjustments, include real estate, dedicated/immunized bonds and leveraged buy-out funds.

Real estate equity assets grew 23.8%, to $43.7 billion reported from the Top 200 defined benefit plans a year earlier, although the average allocation to real estate among the Top 200 defined benefit plans dropped slightly. Given a market return from the FRC Index for real estate of 6.7% for the year ended Sept. 30, real estate investment grew an adjusted 15.9% among the Top 200 funds.

Use of dedicated/immunized bond funds among the Top 200 rose an unadjusted 29.2%, to $34.1 billion, and leveraged buy-out commitments rose 28.6%, unadjusted, to $4.5 billion.

Mortgages and guaranteed investment contracts were the biggest losers in terms of percentages of assets in the Top 200 defined benefit plans. Mortgages dropped 11.2%, to $16.7 billion, while GICs and their cousins, bank investment contracts, dropped 51.3%, to $3.9 billion.

Gene Gochenour, president of GIC Inc., Beaverton, Ore., said the decline in the use of GICs and BICs likely is because pension executives "don't want to tie up their assets" in instruments returning 8%. "We still have a lot of plans around with 8.5% actuarial assumptions."

Guaranteed contracts made up the largest asset class among corporate defined contribution plans, accounting for 35.7% of the aggregate asset mix.

With new defined contribution plans being formed and existing ones growing, the outlook for the equity markets isn't rosy, because defined contribution plans invest much of their assets in fixed-income instruments.

"We're not going to see as much institutional money pumped into the stock market because of the rise of defined contribution plans," Wyatt's Mr. Scott said. "With more money going into defined contribution plans directed by participants toward safer investments, it could have serious ramifications for the development of capital in the future."

Plus, he said, defined contribution plans are leading the investment management industry to construct new commingled funds, an investment vehicle chosen by many defined contribution plans. "The separate account business is not growing very quickly." ■

Chase looks beyond Japanese pensions

NEW YORK — Although cool toward the possibility of directly managing pension fund assets in Japan, Chase Investors Management Corp. is hot on attracting other institutional assets from that island nation.

Already, Chase, which has been operating in Japan since 1982, has found opportunities managing U.S. dollar-denominated securities and U.S. real estate for Japanese trust banks and insurance companies. Last year, Chase Investors began offering in Japan enhanced corporate cash management services.

The latter affords an attractive alternative to the Japanese pension market, officials at Chase believe. Corporate "cash is increasing in Japan largely because of tremendous profitability of Japanese corporations, which also enjoy low-cost financing," pointed out Lawrence F. Weber, a managing director of Chase, New York. Moreover, the "size of the capital markets in Japan is not growing as rapidly as the assets are. So more of these corporate assets are being managed outside of yen-denominated instruments. And the tendency is to go into the dollar," he said.

Chase is addressing this opportunity in corporate cash management by offering managed and structured portfolios. Mr. Weber concedes his firm has lagged some of its competitors in seeking this business, but Chase's "very strong name in Japan" should help it "play catch-up."

Meanwhile, the firm hopes to continue attracting assets from Japanese trust banks and insurers. This way, it can indirectly benefit from the expected growth in Japanese pension assets.

Thus far, Chase's strategy has been to provide management of U.S. securities — such as growth or value stocks and mortgage-backed securities — and U.S. properties, areas where clients have less expertise.

"We recognize that our Japanese institutional clients will try to do as much investing as they can themselves. For instance, with the help of generally available information, they are able to select large-cap U.S. stocks or Treasuries," said Mr. Weber. "We try to complement their activities with our expertise in areas where they may lack the resources."

For example, in 1986 the firm began offering bond funds that are double-hedged against interest rate and currency risk. Last year, it also offered for the first time in Japan, a fund for investing in mortgage-backed securities.

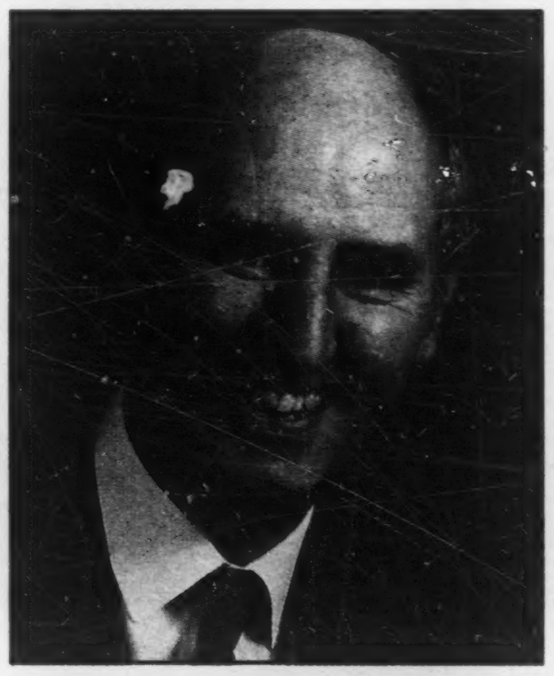
Looking ahead, the firm expects to offer "new, structured products being developed by our hedging group," said Mr. Weber, adding these should include "structured asset allocation products for equities, fixed income and currencies."

Chase's investment and marketing strategies have been bearing fruit. The firm counts as clients more than 50 of Japan's financial institutions, or about 70% of Japan's trust banks and life, fire and casualty insurers, said Mr. Weber.

With a total of $35 billion under management, Chase has attracted some $17 billion from international clients, including about $4.25 billion from Japan.

According to *Pensions & Investments*' foreign business survey (*P&I*, July 24), Chase ranked second among U.S. managers of foreign institutional assets, behind Citicorp Investment Management, New York. ■

— *Margaret Price*



Lawrence Weber says Chase's name is an asset in Japan.

Hartford fund receives option to purchase office building

HARTFORD, Conn. — The $400 million Hartford Municipal Employee Retirement Fund has an $11.275 million option to buy the Hartford Times Building, which would be leased to the city as office space, City Treasurer Denise L. Nappier said.

The City Council, in a unanimous vote, authorized City Manager John C. Burke to negotiate a rental agreement with the pension commission. The purchase of the building was contingent upon the council's vote, Ms. Nappier said.

Mutual Life Insurance of New York, the mortgage holder, must approve the deal before the pension fund can buy the building from North American Investment Realty Ltd. of East Hartford.

The option expires Feb. 1.

The pension commission would assume the current mortgage until September 1993, when a balloon payment would complete the deal.

A proposed lease agreement — which is negotiable — suggested rent from the city of $1 million annually and operating expenses of $500,000 a year, according to Ms. Nappier.

At the end of seven years, the city would have the option to buy the building from the pension fund or renegotiate two five-year lease terms, Ms. Nappier said.

Travelers Corp. leases space in the building, but the lease expires in 1991, according to Ms. Nappier.

To date, the Hartford pension plan's real estate investments make up about 0.2% of total assets, or about $800,000. ■

General Motors

Continued from page 1

showing GM as a solid outfit, which it is."

Summing up GM's problems, the proposal notes GM stock value has deteriorated from $56 per share in the mid-1960s to $43 today, while its asset value increased to more than $170 share.

GM has $168 billion in assets and only $27 billion in stock. Its assets include $9.1 billion in cash. Its market share also has deteriorated, with no recovery yet. And the Standard & Poor's 500 Stock Index outperformed GM by double from 1983 to 1989.

To boost the company's stock value, the group wants GM to create a $1 billion leveraged employee stock ownership plan; to require board members to own at least $100,000 worth of GM stock; to spin off some GM operations with stock to shareholders; and to pay out excess capital accumulation to stockholders.

The proposal also calls for selling GM stock to a broader range of investors and a two-for-one stock split, among other things.

The employees are asking GM to implement the restructuring plan or to include it in the 1990 proxy as a management-endorsed resolution.

The group has contacted a few GM institutional investors — whom Mr. Lyon wouldn't name. The institutions were asked to back the restructuring plan itself and to consider co-sponsoring it as a shareholder resolution.

Among GM's largest institutional investors are the New York State & Local Retirement Systems, the California Public Employees' Retirement System, the California State Teachers' Retirement System, the College Retirement Equities Fund and the Michigan Department of the Treasury.

A few institutional shareholders contacted by the group told *Pensions & Investments* they were studying the proposal, but did not want to be identified. GM is 43% owned by institutional investors.

The proposal would keep the pressure on a company whose performance has been slipping for years. 1989 earnings are expected to be dismal.

Two weeks ago, two large, long-term GM stock investors — the New York State & Local and the California Public Employees' systems — sought to underscore GM's declining performance by writing separate letters to GM Chairman and Chief Executive Officer Roger Smith and the rest of the board of directors. Both funds stressed their long-term commitment as owners of GM and a desire to build a constructive relationship with management.

Specifically, New York asked for information on the selection process for the next chief executive. California asked what standards would be developed to evaluate the performance of the new management, and what kind of policies were planned for an ongoing relationship with GM shareholders, especially institutional investors. The California pension fund suggested the board set up a committee to develop and oversee such a structure.

A review committee composed entirely of outside directors was formed last fall to evaluate candidates to succeed Mr. Smith, who is slated to retire later this year.

Mr. Smith and the rest of the board didn't respond quickly to the pension funds' letters. Neither fund received a written response, but a GM spokesman said one is being prepared. Mr. Smith spoke with the New York fund last week and is scheduled to speak with the California fund today.

Fund executives are perturbed their requests were ignored, but believe they made their point. New York holds more than 5.1 million shares of GM stock; California holds 6.2 million shares.

Edward V. Regan, the New York state comptroller and sole trustee of the New York pension fund, says he's not ruling out further action, but has none planned. He also believes it's unlikely the state pension fund will target other poor performing companies in this way. GM, he said, was a special case because it is such a well-known company.

California is considering its next step, said Richard Koppes, general counsel for the pension fund. He said he was heartened by calls from other shareholders and stakeholders who urged the pension fund to keep up the pressure on GM's board. California is looking at other laggards among its holdings, and may target some of them. Dale Hanson, chief executive officer of the fund, previously has cited Occidental Petroleum Corp. and United Airlines.

Not all institutional investors are pleased with the questions being asked of GM's board. Like many corporate executives, some institutional shareholders believe some activist pension funds are asking to be involved in corporate affairs in which they shouldn't have any say.

But the activists counter that argument by saying they are justified in communicating with the board of directors they elect and, that because they are long-term investors, they need to be well informed about the company. ■

Equities

Continued from page 2

showed the biggest increase in terms of percentage points, raising its equity allocation 29 points. Despite the prodigious move, the increase raised Phillips' total equity allocation to a mere 35% of its fund as of Sept. 30 from 6% on the same date in 1988.

Of the 68 corporate funds reporting comparative data, only nine others had total equity allocations lower than Phillips' current mix.

Rex Holsapple, Phillips' director-foreign exchange and pension funds, explained the big jump in equities as a move to a more typical equity mix.

"It wasn't that we were unusually bullish on equities," he said. "We just felt we were severely underallocated," the result of a 1986 defined benefit plan reversion that reduced the size of the remaining fund and left it heavily weighted in fixed income.

"The (equity) allocation still is really not that heavy," he said, adding that he was unable to say if Phillips will increase the allocation still further this year.

The $50 million American Stores Co. defined benefit fund showed the biggest decrease in terms of percentage points, chopping it by 40 points. The move cut American Stores' total equity allocation to only 11% of its fund, the smallest of any of the Top 200 corporate funds. Besides the defined benefit plan, American Stores has defined contribution assets totaling $1.8 billion.

The $2.39 billion Atlantic Richfield Co. defined benefit fund raised its equity allocation 20 percentage points, the largest equity increase of the very large defined benefit funds. The move raised Arco's total equity allocation to 74% of its fund and put it in second place as the fund with the largest equity allocation.

The most bullish of all of the funds is the $2.5 billion pension fund of Deere & Co., with a corpulent 77% of its assets invested in equities. That represents a modest two percentage point increase for Deere during the 12-month period.

The $1.4 billion FPL Group Inc. defined benefit fund reduced its equity allocation 12 percentage points, the largest decrease of the very large defined benefit funds. The move, nevertheless, left FPL, the parent of Florida Power & Light Co., with a still fairly normal equity allocation of 53% of its fund.

The Aluminum Co. of America had the smallest equity allocation of the very large corporate funds, at only 21% of its $2.66 billion defined benefit fund. That allocation is only slightly less bearish than the 17% of its fund it allocated in 1988.

The $9.23 billion Colorado Public Employees Retirement System raised its equity allocation 15 percentage points, the largest of the 57 reporting public funds in the Top 200. The move raised the Colorado fund's equity allocation to 46% of its fund.

Of the public funds, the largest decreases in terms of percentage points were by the $3.69 billion Kansas Public Employees Retirement System, the $17.95 billion Michigan State Employees Retirement System and the $23.5 billion Teacher Retirement System of Texas; each reduced its equity allocation seven points. The moves left the Kansas fund with 32% of its fund in equities; Michigan with 39%; and Texas Teachers with 31%.

The $3.48 billion Los Angeles Fire & Police Pension System raised its equity allocation 12 percentage points. The increase put its equity allocation at 66%, the highest of public funds. The public fund with the second highest equity allocation was the $11.18 billion Oregon Public Employes Retirement System with 59%, up two percentage points.

Of the six Taft-Hartley or jointly trusteed multiemployer defined benefit pension funds reporting asset mixes in the Top 200, five raised their equity allocations. The $2.24 billion Hospital & Health Care Employees National Pension Fund reported the largest jump in the period, at 23 percentage points. The move raised the fund's equity allocation to 55%, the highest of the multiemployer or union-oriented funds.

The $9.85 billion Teamsters, Central States, Southeast & Southwest Areas Pension Fund, was the only Taft-Hartley fund to reduce its equity allocation in the period. Morgan Stanley Inc., New York, the named fiduciary of the Teamsters fund, directed its 12 percentage point decrease. The move cut the Teamsters' equity allocation to 31%, giving it the most bearish equity allocation among the union-oriented funds.

The University of California had the largest equity allocation among the eight miscellaneous funds at 71% of its $11.77 billion fund, down three points from 74% in 1988.

The $1.58 billion fund of the General Board of Pensions of the United Methodist Church ranked second among the miscellaneous funds in equity allocation at 60%, up four percentage points from 1988.

The Annuity Board of the Southern Baptist Convention increased its equity allocation 11 percentage points, the highest increase of the miscellaneous funds. The move gave the Southern Baptists an allocation of 51% of its $822 million defined benefit fund.

Among the 68 corporate funds, 50 raised their equity allocations during the period, 15 lowered it and three left it unchanged.

Of the 59 public funds, 39 raised their equity allocation, 16 lowered it and four left it unchanged.

Among the eight miscellaneous funds, only the United Nations Joint Staff pension fund and University of California reduced their equity allocations. ■

Axe-Houghton joins nuke arena

TARRYTOWN, N.Y. — Axe-Houghton Management Inc. has entered the growing nuclear decommissioning trust management field with a new twist on a familiar product.

Seeking to differentiate its services as a late entrant to the market, Axe-Houghton is offering fully insured municipal bond portfolios in its active management of nuclear trusts.

Nuclear decommissioning trusts are set up for the eventual decontamination of each of the country's more than 100 nuclear power plants when they reach the end of their useful lives, after about 40 years of operation. A directive of the Nuclear Regulatory Commission mandates trust funds be set up outside the utility's day-to-day control by July 1990.

Advisers have been scrambling to get clients, whose decommissioning trusts are expected to total more than $100 billion.

While insured bond portfolios are not new in and of themselves, Stephen J. Darby, Axe-Houghton's president, said he thinks they are new as applied to nuclear decommissioning trusts.

Municipal bonds are a main staple of the trusts, as current tax laws allow a deduction of contributions to trust funds that limit their investments to U.S. Treasuries, municipal bonds and certain certificates of deposit with banks and credit unions. A proposal in Congress would allow equities in these so-called qualified trusts, but even if passed, municipals are expected to continue to play a role because of the trust income tax implications.

The bonds will be insured through Municipal Bond Investors Assurance Corp.

"The insurance feature sets this service apart from others in the industry," Mr. Darby said. "It's a great safety net that not only elevates the bonds in a nuclear trust portfolio to a AAA rating, but importantly protects against default and downgrading of those bonds."

He said the insurance, and subsequent AAA credit rating, will also help a utility meet liquidity needs if an early decommissioning risk materializes. ■

Campeau

Continued from page 1

lack merchandise.

But the long-term effect of the bankruptcies will be good for malls because Campeau will be out of retailing.

According to Hans Mautner, chairman of New York-based Corporate Property Investors, Robert Campeau planned to create five to 10 malls a year, anchored by Campeau stores.

"The notion was fanciful," Mr. Mautner said. "If one was looking for a silver lining, this might be it because it may cause a lesser number of malls to be created in the future," Mr. Mautner said.

The lack of Campeau's influence is more a positive than the bankruptcies are a negative, said Paul H. Saylor, a principal with Institutional Property Consultants Inc., Atlanta.

Other real estate industry professionals point out it was Campeau's debt, not poor sales, that led to the bankruptcy filing. Sales drive the value of a mall, noted Jake Young, a principal with Roulac Real Estate Consulting Group, Chicago.

Malls in second-tier cities could suffer the most, because that's where Allied and Federated would be mostly likely to close stores.

If the bankruptcies cause problems for pension funds, they are likely to occur through commingled funds, contends John Hart, president of Hart Advisors, a Hartford, Conn.

Direct investors usually buy major centers in major markets, where Allied and Federated would be less likely to close stores, Mr. Hart said.

Malls that are bought through commingled funds, however, are often in second-tier cities, he said.

"It would be the more marginal ones you would worry about," he said. But the losses would be mitigated by the pooling of the money in the fund, he added.

Nancy Lashine, a principal with The O'Connor Group, New York, disagreed with Mr. Hart's assessment of commingled funds. Because commingled funds have more capital, they can invest in larger properties, she said. O'Connor's Retail Property Trust, a $650 million commingled fund, invests in malls in major cities with top-rated department stores, Ms. Lashine said. ■

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s&Investments

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AT DEADLINE

AT&T's Roessler retires

Ronald R. Roessler has retired from AT&T, where he was director for investment and risk management for the $43 billion pension fund.

Mr. Roessler accepted an enhanced retirement program that was part of a corporate downsizing. He had been with the Bell system since 1961.

Hearing delayed

The Pennsylvania House has delayed hearings until Feb. 15 and 16 on the anti-takeover bill for state corporations that passed the state Senate in December.

The bill, opposed by the state's two public pension funds, would place restrictions on investors of less than two years, limit the ability of raiders to vote their shares and allow corporate boards to consider interests other than those of shareholders.

Realty researcher moves

Real estate modern portfolio theorist Susan Hudson-Wilson has left John Hancock Properties to become vice president and director of market research at another Boston company, Aldrich, Eastman & Waltch. At Hancock, her position is being absorbed by Mark Lauritano, director of research, and a marketing person yet to be hired.

Global fund for mortgages

The Blackstone Freddie Mac Mortgage Securities Fund, the first mortgage fund sold to institutional investors globally, has drawn $531 million from Asian and European institutions.

The fund consists primarily of mortgage-related securities issued or guaranteed by the Federal Home Loan Mortgage Corp. and privately issued mortgage-related securities collateralized by Freddie Mac securities.

Kemper picks chief

Kemper Securities Holdings, the new holding company for Kemper Financial's securities business, named James R. Boris chairman, chief executive officer and president. Mr. Boris will continue as head of INVEST, a financial services firm in which Kemper owns an 85% stake.

San Diego hires

The $825 million San Diego City Employees' Retirement System has hired Putnam Cos. Inc. and Southeastern Asset Management Inc. as small-cap equity managers.

Each firm will receive $15 million.

LBO investors get tougher

Institutional investors are extracting tougher terms from the general partners of LBO and related limited partnership funds, says Robert Johnson, president of Beacon Hill Financial.

He said general partners will have to invest more of their own money in deals and share more of their fees with limited partners.

More enforcement muscle

Private sector will finance Bush budget hike for DOL

By Joel Chernoff

WASHINGTON — The Bush administration is asking Congress for a major increase in the Department of Labor's pension-law enforcement staff, and is promising a legislative package to improve policing of employee benefit plans.

But the burden of that package may fall heavily on the private sector, in terms of increased auditing costs and greater potential liability.

That proposal, along with one allowing a one-time transfer of surplus pension assets to retiree medical accounts, is contained in the Bush administration's budget request for fiscal 1991, which starts Oct. 1, 1990.

The transfer provisions are very limited and will not be attractive to many companies. Still, experts believe the administration's active support enhances the likelihood of some retiree health transfer provision passing this year.

The proposed budget would increase the Labor Department's investigative staff by about 50%.

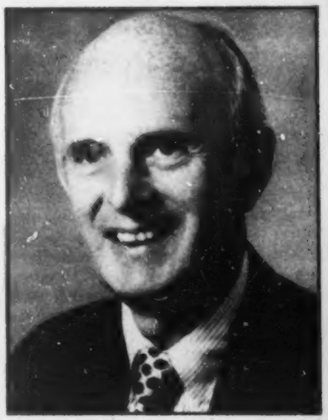
The proposed increase is "clearly an effort on the part of the administration to show it's responsive," said Frank McArdle, manager of Hewitt Associates' Washington office.

The Bush administration would increase spending for the department's Pension and Welfare Benefits Administration in fiscal 1991 to $58.1 million from $43.1 million. The budget proposal would increase the number of investigators by 100 to about 300 positions. The PWBA's total staff would increase to 605 positions from 505.

An additional 33 positions would be given to the solicitor of labor's office for prosecuting pension and benefit plan cases. Another 12 positions in the solicitor's office would be shifted to the benefits area.

Since the Employee Retirement Income Security Act was enacted in 1974, private pension assets have increased to $1.7 trillion from $290 billion, but the number of investigators has remained static, according to the Labor Department.

The increase in staff, plus enhanced enforcement capabilities from development of a computerized data base, would enable the PWBA to perform an additional 1,000 investigations per year, up from about 1,600 now, explained David George Ball, assistant secretary of labor for pension and welfare benefits.

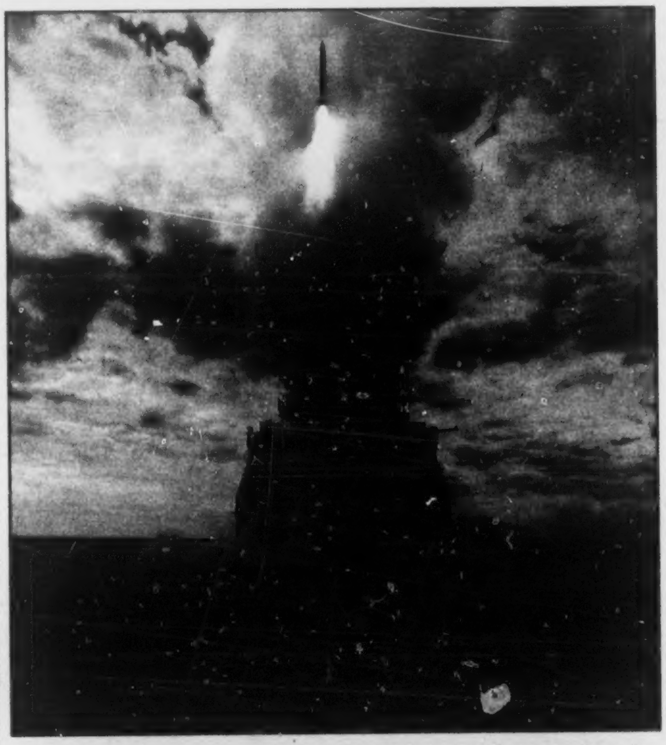


David Ball says more money means more investigations.

Mr. Ball said the increased resources will permit the department to pursue increased civil and criminal investigations.

Meanwhile, Raymond Maria, the Labor Department's acting inspector general, who has charged benefit plans are subject to widespread fraud and abuse, said the department's enforce-

See **Labor** *on page 33*



Martin Marietta, which produced this shipboard defense system, is one defense company whose diversification is attracting investors.

Contrarian outlook puts hopes in orbit

By Hillary Durgin

Wall Street's pessimism about the defense and aerospace industry's prospects for growth is creating a market opportunity for investing in companies branded with the defense stigma but viewed as large, well-managed and diversified.

"Wall Street is almost unanimously negative on these stocks — that's the making for a nice contrarian story," said Jeff Ubben, analyst at Fidelity Investments, Boston, and manager of the firm's Select Defense and Aerospace Portfolio.

While they're discarding stocks of prime military contractors such as **McDonnell Douglas Corp.** and **Lockheed Corp.**, institutional investors are stocking up on **E-Systems Inc.** and **Loral**

See **Defense** *on page 33*

Indexing, diversity give managers edge

By Trudy Ring

State Street Bank & Trust Co. and Bankers Trust Co. gained the most new investment management business from pension and other tax-exempt funds in 1989 as index fund and multiproduct managers dominated the industry.

GIC managers led among medium-size investment management firms in the Scorecard Survey, those with between $1 billion and $10 billion in assets; international investment specialists led in the $250 million to $1 billion category, while the biggest gainer among the smallest managers was a start-up firm formed by executives who left a bank subsidiary.

Among the largest firms — those with more than $10 billion under management — State Street Bank & Trust, Boston, led with a net dollar gain of $9.1 billion in discretionary U.S. tax-exempt institutional assets in 1989. Bankers Trust Co. — Investment Management Group, New York, followed with $7.8 billion.

Of State Street's new business, $2.5 billion was for index funds; of Bankers Trust's new business, $3.5 billion was indexed.

The top 10 also include another major indexer, Wells Fargo Investment Advisors, San Francisco, and several multistrategy managers — Fidelity Institutional Retirement Services Co. and Fidelity Management Trust Co., both of Boston; J.P. Morgan Investment Management Inc., New York; and Brinson Partners Inc., Chicago. International investments were a major factor for Wells Fargo, State Street, Fidelity Management Trust, Brinson Partners and Bankers Trust.

"I see the categories of passive investors are still doing well," said Ronald D. Peyton, president of Callan Associates Inc., San Francisco. "Large multiproduct line managers who have quality control are still doing well. . . . The growth of these firms really speaks to the quality of their operations as well as their marketing."

Scorecard results: Page 17

"I don't think it's at all unusual to see the passive and the multiproduct firms" among the top gainers, added Dave Eager, managing partner of Eager & Associates, Louisville, Ky., a consultant to money managers.

"The firms that have multiple products are going to be well-positioned," said Ron Jones, partner of Hewitt Associates, Lincolnshire, Ill.

Rounding out the top 10 are firms described as "niche players" — Pacific Investment Manage-

See **Survey** *on page 20*

NEWS DIGEST

First Executive Corp.'s junk bond losses could lead Congress to investigate annuity quality. Page 4.

President Bush's transaction fee proposal on futures contracts would hit individual investors hard and might reduce market liquidity. Page 6.

Sen. Daniel Patrick Moynihan's suggested cut in the Social Security tax should spark debate on a national retirement policy. Page 12.

A Merrill Lynch unit has asked that a suit filed against it by Harvard University be dismissed, but the school won't give up without a fight. Page 22.

Short selling strategies allow equity investors to exploit market inefficiencies while lowering risk. Page 27.

SPECIAL REPORT: 1989 SCORECARD

Investment firms with multiproduct and indexing capabilities, as well as discretionary guaranteed investment managers, were among the big winners in *P&I*'s annual tally of advisory firm new business growth. Pages 1, 17.

FINANCING

BellSouth Corp.'s Jan. 24 debt issue — the first to be sold for use in an ESOP — received a positive reaction from investors. Page 2.

The value of event risk protection is questioned as demand for corporate bonds exceeds supply. Page 3.

U.S. multinational companies must be ready to jump on Europe 1992 opportunities. Page 26.

INTERNATIONAL

International stock index funds again pace the growth among overseas investment firms. Page 17.

Japanese corporations may cool their domestic investing, freeing up more funds that could be put to work in the United States. Page 23.

Morgan Stanley has changed the composition of the Singapore-Malaysia Index within its EAFE benchmark after stock trading rules were altered. Page 29.

REAL ESTATE

The New York State Teachers pension fund is providing $100 million in financing for Oryx Energy Center, Dallas' first office development in three years. Page 8.

The desire for core real estate portfolios fueled the growth in business at some realty firms. Page 19.

Dean Witter Realty enters the hunt for tax-exempt institutional clients with a pitch for its value-creation strategy. Page 29.

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Managers' survey under way

Pensions & Investments is preparing to mail questionnaires for its annual directory of investment advisers. If your firm has not participated in the past and would like to, or if your firm has moved in the past 12 months, please contact Christine Philip, directory coordinator, at (312) 649-5217. You also may send the information via facsimile machine, at (312) 649-5228.

BellSouth sells ESOP debt

Proceeds pre-fund other benefit plans

By Curtis Vosti

Southern
A BELLSOUTH

BellSouth, the first company to issue ESOP debt in the capital markets, will use the proceeds to buy 16 million shares of stock.

ATLANTA — The first debt offering sold for use in an ESOP — BellSouth Corp.'s $275 million issue — will be used to pre-fund company matches to defined contribution plans.

The Atlanta-based telecommunications giant went to the market Jan. 24 with the issue as the first part of a three-tranche $850 million public debt offering to fund a leveraged employee stock ownership plan. The proceeds will be used to meet — and increase — future company matches to its $2.3 billion defined contribution vehicles, including 401(k) and other savings plans. Because the transaction is being done through an ESOP, the company will receive tax advantages for dividends paid on the stock.

The sale makes BellSouth the first company to actually issue ESOP debt in the capital markets, though others — such as Upjohn Co., Kalamazoo, Mich., and Mobil Oil Corp., New York — are awaiting approval from the Securities and Exchange Commission before selling debt for ESOPs (*Pensions & Investments*, Dec. 25).

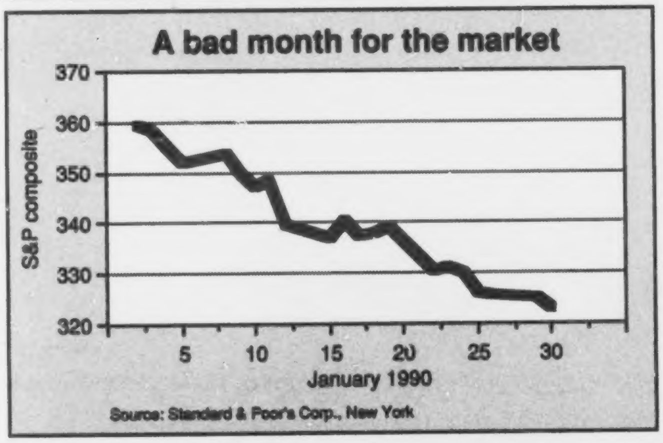
The medium-term non-callable notes — maturing July 3, 2003 — sold by BellSouth carry an interest rate of 9.125% and are rated AAA by Standard & Poor's Corp. and Aa1 by Moody's Investors Service Inc.

The $850 million in proceeds from the debt issues will be used to buy 16 million shares of stock. As the debt is paid down, the ESOP will allocate the shares to the savings plans.

Financing for the $550 million trust planned for the salaried employees was divided into two $275 million debt offerings.

"We felt that $550 million was too big a debt offering," said Alan Gasiorek, BellSouth assistant

See **BellSouth** *on page 34*



Source: Standard & Poor's Corp., New York

Investors are calm despite market drop

By Trudy Ring and Leonard J. Hollie

Despite a nearly monthlong beating in the equity market, most institutional investors say they're not ready to throw in the towel just yet.

As a matter of fact, the 10.2% drop in the Standard & Poor's 500 Stock Index and the 9.5% fall in the Dow Jones Industrial Average between Jan. 2 and Jan. 30 — apparently the result of selling by mutual fund shareholders and foreign investors — haven't prompted any of the pension executives interviewed to change their equity allocations.

Money managers, some of whom think the market is still overvalued, are neither raising cash nor going bottom-fishing for stock market bargains.

"We have suffered these declines in the market before. I don't see a permanent diminution in value in the stock market or anything to change our long-term strategy," said David White, vice president for capital management and trust investments at Unisys Corp., Blue Bell, Pa. "We are still invested at the same level that we were a year ago, which is 60% of our investments worldwide, or $2 billion, in equities." Unisys has more than $3 billion in defined benefit plan assets.

"As J.P. Morgan once said, the market will fluctuate," said William H.S. Preece, assistant treasurer of Motorola Corp., Schaumburg, Ill. Motorola's $575 million pension plan has 60% in equities, and its $1.1 billion profit-sharing plan has 50% in stocks.

"We've ridden out all the other bad days we've had in the recent past," said Mary Ann Devine, director-pension investments for Southwestern Bell Corp., St. Louis. Southwestern Bell's more than $7 billion defined benefit plan has 53% in equities.

At least one pension fund finds

See **Market** *on page 33*

Labor, firm battle over vote issue

By Marcia Parker

Organized labor is asking the Council of Institutional Investors and Pacific Enterprises' institutional shareholders to help defeat what the AFL-CIO calls the company's latest "frontal assault on shareholder rights."

Pacific Enterprises, Los Angeles, the parent of Southern California Gas Co., has called a special shareholders meeting Feb. 15 solely to seek approval of a proposal to eliminate cumulative voting in the election of directors in favor of majority voting.

In the latest instance of increasing union activism in corporate governance, the AFL-CIO and the Utility Workers Union of America allege Pacific Enterprises is pursuing the change partly to fend off any attempt by the Utility Workers to gain a seat on the gas utility and drug retailer's board.

Sam Weinstein, western regional director of the union that represents 5,000 Pacific Enterprises employees, last year tried and failed to land a seat on the board. He might try again this year, but, without cumulative voting, he would have virtually no chance of winning.

Elimination of cumulative voting also would discourage the accumulation of large minority positions as a prelude to a takeover. The company also has several other takeover repellents in place, including a poison pill and golden parachutes for its executives. Pacific Enterprise's share price has fallen to $45.75 from more than $60 prior to the October 1987

See **Voting** *on page 34*

GIC managers blossom

efined contribution asset boom credited for increase

Fred Williams

989 may be remembered as the r discretionary management of aranteed investment vehicles ained the level of respect held management of more tradinal assets, such as equities and nds.

The 10 GIC managers with the st new business gained a phemenal total of $12.34 billion ring 1989, according to *Penns & Investments'* Scorecard rvey. That's about 50% more an the top 10 gainers in 1988.

Industry sources say the draatic growth in discretionary anagement of guaranteed instments comes almost exclusily from internally managed deed contribution plans, usually 1(k) plans, whose executives find the growing size and number of contracts and overlapping maturity schedules too much for part-time management.

That, combined with increased concerns about credit quality of insurance carriers and the volatility in the equity markets, stimulate even more interest in GICs in participant-directed plans.

Nine of the top 10 gainers among GIC managers achieved growth of more than $250 million during 1989. The top four — Fidelity Institutional Retirement Services Co., Boston; PRIMCO Capital Management Inc., Louisville, Ky.; Morley Capital Management Inc., Lake Oswego, Ore.; and T. Rowe Price Guaranteed Asset Advisors, Glen Allen, Va. — gained at least $1 billion.

And GIC managers expect the growth to continue during 1990 and for the next two to three years before leveling off.

"GIC management has been solidified in 1989," said Ken Walker, president of T. Rowe Price Guaranteed Asset Advisers, which picked up $1.006 billion in new business from U.S. institutional tax-exempt funds. "The GIC market is currently in a state that the bond market was in during the early 1970s. It took a while for it to catch on but as they (GIC managers) emerged, people began hiring them instead of buying and holding contracts internally. I don't know of another asset class that is not managed."

Peter Bowles, president of Fiduciary Capital Management, Woodbury, Conn., which gained $350 million in new GIC business, said the growth is reflective of the move to defined contribution plans from defined benefit plans.

Also, he said plan sponsors "are starting to apply the same prudent investment disciplines as they have traditionally to bond portfolios. In the past, GICs were excluded from the normal portfolio structure. GICs are probably where bond management was 30 years ago when people used to put bonds in a safe deposit box and cashed them in when they ma-

See **GIC managers** *on page 18*

Most new GIC business (net)*

Firm	$ millions
Fidelity Institutional	3,092
PRIMCO Capital	2,055
Morley Capital	2,000
T. Rowe Price Guaranteed	1,006
Certus Financial	1,000
Bankers Trust	997
State Street Bank & Trust	859
IDS Trust	839
Fiduciary Capital Mgmt.	350
Bank One, Indianapolis	141

*Excludes insurers

SCORECARD

Net dollar gain

Top managers over $10 billion

Firm	$ millions
State Street Bank & Trust	9,107
Bankers Trust	7,804
Fidelity Institutional	5,615
J.P. Morgan	4,253
Pacific Investment	3,683
Wells Fargo Investment	3,034
Delaware Investment	1,705
Lincoln Capital	1,500
Brinson Partners	1,443
Fidelity Mgmt. Trust	1,375

Top managers $1 billion to $10 billion

Firm	$ millions
PRIMCO Capital	2,056
Morley Capital	2,000
Western Asset Mgmt.	1,892
Goldman, Sachs Asset Mgmt.	1,407
Northern Investment	1,320
BEA Associates	1,251
Yarmouth Group	1,135
CNA Insurance	1,126
Eagle Asset Mgmt.	1,076
GAMCO Investors	1,058

Top managers $250 million to $1 billion

Firm	$ millions
Hill Samuel Investment Advisers	[illegible]
Boston International Advisors	464
JCW Investments	450
Morgan Stanley-Chicago Group	440
Consistent Asset Mgmt.	430
Atlantic Portfolio Analytics	417
Ryan Labs	412
Matuschka & Co.	401
Brandywine Asset Mgmt.	387
Advanced Investment Mgmt.	303

Top managers under $250 million

Firm	$ millions
Spare, Tengler, Kaplan & Bischel	205
Mid-Atlantic Realty Advisors	182
Cadence Capital	147
AMB Institutional Realty	135
Lincoln Asset Mgmt.	130
Wardley Investment Services	100
Carl Domino Associates	97
Paradigm Partners	96
Rich Investment	96
Seaboard Investment	86

The figures in this and all other Scorecard charts refer to U.S. institutional, discretionary tax-exempt assets.

Most new equity business (net)

Top managers over $10 billion

Firm	$ millions
State Street Bank & Trust	6,062
Bankers Trust	2,142
Fidelity Institutional	1,388
Delaware Investment Advisers	1,213
Wells Fargo Investment	1,020
INVESCO Capital	525
Pacific Investment	323
Oppenheimer Capital	313
J.P. Morgan	310
Fidelity Mgmt. Trust	303

Top managers $1 billion to $10 billion

Firm	$ millions
GAMCO Investors	1,058
Eagle Asset Mgmt.	1,056
SASCO Capital	349
Morgan Grenfell Capital	329
Trinity Investment	311
Barrow, Hanley, Mewhinney & Strauss	279
Nicholas-Applegate Capital	277
Newbold's Asset Mgmt.	246
Hotchkis and Wiley	220
Goldman, Sachs Asset Mgmt.	194

Top managers $250 million to $1 billion

Firm	$ millions
Brandywine Asset Mgmt.	307
Morgan Stanley-Chicago Group	318
Advanced Investment Mgmt.	300
NFJ Investment Group	270
Chicago Corp.	229
Lynch & Mayer	210
Investment Research	190
WEDGE Capital	166
Schaenen Wood & Associates	160
Fisher Investments	159

Top managers under $250 million

Firm	$ millions
Spare, Tengler, Kaplan & Bischel	185
Cadence Capital	147
Carl Domino Associates	96
Rich Investment	95
Snyder Capital	85
Cedar Hill Associates	50
Philadelphia Investment	40
Davis Hamilton Associates	33
RXR Capital	31
Fox Asset Mgmt.	31

Most new fixed-income business (net)

Top managers over $10 billion

Firm	$ millions
Bankers Trust	4,041
Pacific Investment	3,380
J.P. Morgan	2,365
Lincoln Capital	1,328
Metropolitan Life	1,283
RCM Capital	905
Delaware Investment	482
Boston Co.	403
Principal Financial Group	244
Fidelity Mgmt. Trust	194

Top managers $1 billion to $10 billion

Firm	$ millions
Western Asset Mgmt.	1,892
Northern Investment	1,394
Goldman, Sachs Asset Mgmt.	1,213
MacKay-Shields Financial	920
Prudential Fixed Income Advisors	856
Bank One, Indianapolis	707
STW Fixed Income Mgmt.	520
Barrow, Hanley, Mewhinney & Strauss	490
BEA Associates	466
ASB Capital	451

Top managers $250 million to $1 billion

Firm	$ millions
Consistent Asset Mgmt.	430
Ryan Labs	412
Rampart Investment	155
NCM Capital	79
Dominion Trust	69
Todd Investment Advisors	65
Baring America	61
Capstone Asset Mgmt.	49
Bessemer Trust	46
First Nat'l Bank-Omaha	25

Top managers under $250 million

Firm	$ millions
Seaboard Investment	35
Cisneros Asset Mgmt.	29
Benchmark Asset Mgmt.	21
VCS&O Asset Mgmt.	11
Nelson Capital	10
Philadelphia Investment	10
PRIMA	9
Cedar Hill Associates	7
Coughlin Asset Mgmt.	7
Greenwich Asset Mgmt.	7

Overseas investment goes stylish

By Curtis Vosti

International stock index funds again paced new international investments in 1989, but according to *Pensions & Investments'* Scorecard Survey, there was increasing emphasis on active and specialized products.

For the second year in a row, Wells Fargo Investment Advisors, San Francisco, and State Street Bank and Trust Co., Boston, were the top two in terms of net growth of international assets under management, with $2.4 billion for Wells Fargo and $1.85 billion for State Street. Combined, the two added more than the top 10 international managers did in 1988.

In third with $850 million was Capital Guardian Trust Co.

The overwhelming lead the two indexing giants have attests to the continued popularity of indexed international investments. Within the indexing, however, there is an indication the styles are broadening.

According to Patricia Dunn, president of Wells Fargo, about half of the new business was for tilted or customized index funds. "Investors found out there was a lot of flexibility," she said. "They didn't have to lock themselves in. Investors have appreciated that to index you don't have to index country weights."

The top 10 gainers, across all size categories, added $9.487 billion in net new international assets in 1989, more than double the $4.244 billion added by the top 10 in 1988. The top six gainers in 1989 were all from the largest asset category of managers: those with more than $10 billion in total U.S. tax-exempt assets under management. The next three, Nomura Capital Management Inc., Baring International Investment (U.S.) and Oechsle International Advisors, were in the category of those with between $1 billion and $10 billion in U.S. tax-exempt assets under management.

No. 10 overall was Hill Samuel Investment Advisers Inc., which netted the most international assets in 1989 among managers with between $250 million and $1 billion under management.

For the first time in Scorecard, *P&I* has divided the international managers into relative categories, comparing net international growth among firms in groupings of total assets under management. And it is in these categories that active international managers, with various tilts, came out on top.

Brian Fitzgibbon, senior vice president and director of Nomura, New York, said the firm's growth — $612 million net new business in 1989, placing it first among firms with $1 billion to $10 billion total tax-exempt assets under management — came mainly from value-oriented international equity portfolios and regionally focused investments. The firm also added an international fixed product.

Mr. Fitzgibbon said the firm's value approach — backed by a strong in-house research organization — contributed to its growth.

"We've done very well in Japan," he said of the country

See **Overseas style** *on page 19*

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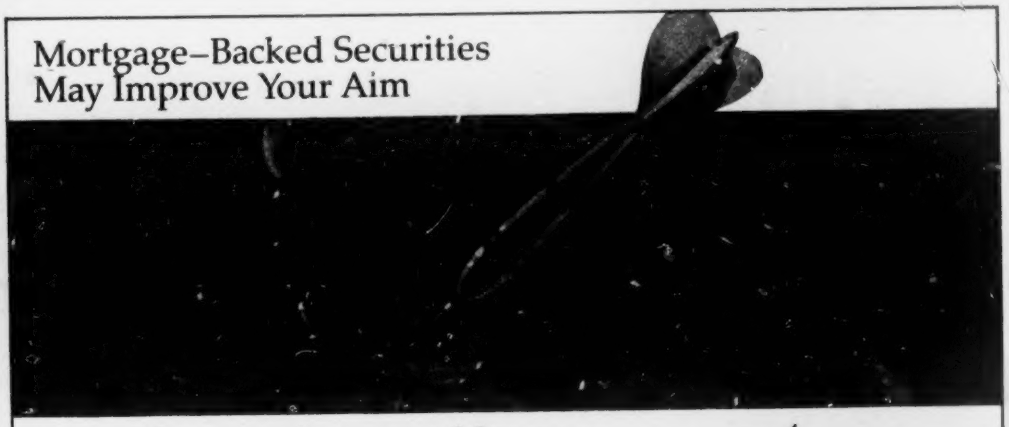

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GIC managers

Continued from page 17

tured, but that is starting to change."

"Plan sponsors typically buy contracts on pre-determined arbitrary dates and managers are in the market every day," said David Perry, president and chief investment officer at Certus Financial Corp., which gained $1 billion in new business from U.S. institutional tax-exempt funds.

Mr. Perry said he would not be surprised to see net new business to the top 10 managers triple in 1990.

"It's no longer a dormant asset class, and people realize there are professionals involved in the business," he said.

Mr. Walker said there will be a "window of opportunity" for existing managers to grow "at a tremendous rate" in the next two to three years before the entry of new players increases competition and slows the growth by the top tier of GIC managers.

Despite the growth of GIC assets under external discretionary management, it still is a very small percentage of the overall guaranteed investment market.

The total market is estimated at upwards of $200 billion, with the annual volume from rollovers and new investments at between $30 billion and $50 billion. Professional money managers control less than 10% of the total, according to most industry sources.

Jason Psome, senior vice president at Brentwood Asset Advisors, a Beverly Hills, Calif., GIC consulting firm, acknowledges the trend toward GIC management, but pointed out most plan sponsors continue to prefer to manage GICs internally with the help of a consultant.

"GIC consultants have the same resources, the same technology and knowledge available to the managers but without the fees associated with GIC managers, usually 20 to 50 basis points on total assets or invested assets," Mr. Psome said. "Either way, managers charge significantly higher fees than consultants to achieve the same results. We feel GIC management is an oxymoron. GICs have a fixed rate, a fixed maturity and are not marked to market. How do you manage them?"

But to the management firms, the internally managed GIC portfolio are the prime prospect for external management.

Vernon Hodge, president and chief investment officer at PRIMCO Capital, said the growth is coming from internally managed defined contribution plans by plan sponsors "who now believe they can achieve better results through outside management."

PRIMCO added $2.05 billion in new business in 1989.

Another source of growth, said Mr. Hodge, is coming from the increased use of GIC funds in participant-directed plans "because of concerns about volatility in the equity market."

"It's the same old story," said Alvey Smith, assistant vice president and investment officer at Bank One, Indianapolis, which gained $141 million in new business. "People can understand them and they provide liquidity; you put a dollar in and you get a dollar out. A lot of GIC portfolios have been done in-house by an assistant treasurer or benefits manager, who is grappling with maybe two or three contracts and, over the years, finds he has $60 million or $80 million. (He) starts looking for help as rates become more volatile and credit analysis of carriers becomes more important. (He) finds it is just easier to turn it over to someone," said Mr. Smith. ■

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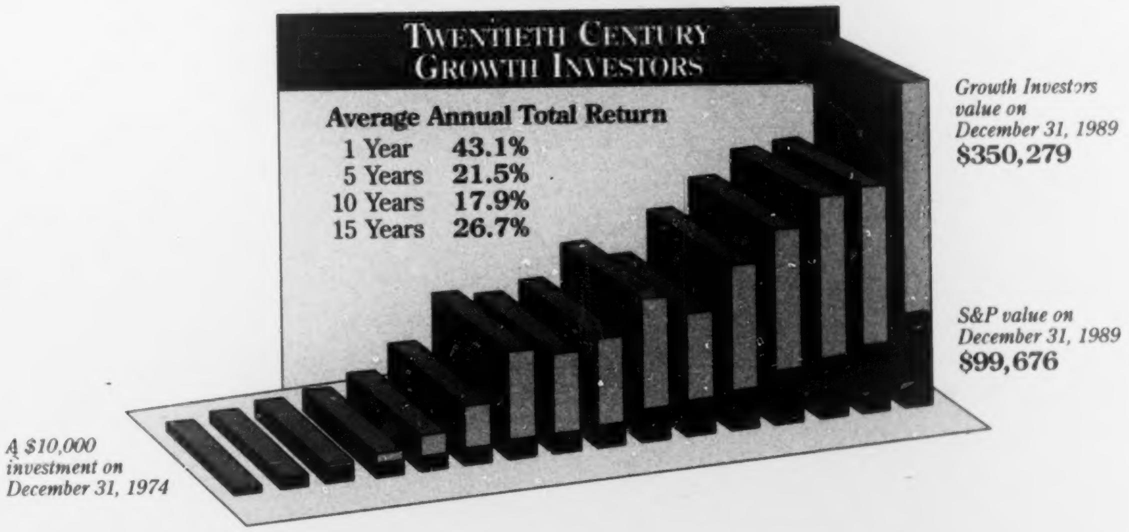

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Overseas style

Continued from page 17

that makes many international investors nervous. "The value approach was not favored in the Japanese markets in 1988," he said. "But we did not change our stripes and were rewarded in 1989."

Baring pocketed the second biggest net assets in 1989 among the second tier of managers, adding $530 million. Jack McNamara, manager of Baring International (U.S.), Boston, said the growth came from two areas: active country/currency allocation and then passive investment within the selected country and, secondly, country-specific or regionally based placements. The firm also received more cash flow from existing clients, he said.

"As plan sponsors become more comfortable with international investing, they like to supplement their EAFE index with targeting of a particular area," he said. In essence, he said, the active country/passive stock strategy is a tilt fund, "tilting away or toward a particular market, like Japan."

Oechsle International Advisors, Boston, was No. 3 in the category of managers with between $1 billion and $10 billion in total assets.

The firm added a net $474 million in international business in 1989.

"We really have only one approach — aggressive country allocation," said Stephen Langer, an Oechsle partner.

He added a main strength is the firm's in-house research.

"That's real important in international because we still contend there is gross pricing inefficiencies in foreign markets," he said.

Research in foreign markets is still in its developmental stage, he said. "It's tough in the U.S. markets to do better than tie (the market performance). Overseas markets are a much more uncharted opportunity."

Hill Samuel Investment Advisers placed No. 1 in net international asset growth among firms with $250 million to $1 billion in total tax-exempt assets under management. The firm added $469 million in 1989.

"We offer the pension sponsor a style of value that is a great complement to a passive portfolio," said I.P. "Kip" Knelman, executive vice president and director for Hill Samuel.

Mr. Knelman said the firm also picked up some regionally mandated and international fixed-income business. He expects that as the 1990s develop, more sponsors will look away from internationally indexed investments, even though the investments outperformed most active managers in the 1980s.

"People forget that in this industry most things go in cycles," Mr. Knelman said. He added it was a "natural evolution to expect more stylized international portfolios in the coming decade.

"Look at the U.S.," he said. "Back in the early 1970s, there was virtually no emphasis on (investment) style."

Boston International Advisors Inc., Boston, finished second to Hill Samuel in that manager grouping, with $454 million in new business in 1989.

Lyle Davis, president, said the quantitative firm uses a two-step process.

First, it values each of the 18 Morgan Stanley Capital International Europe Australia Far East Index markets individually and then it constructs a portfolio using the most attractive stocks from about eight of the most attractive markets.

He said the style has and is expected to draw interest from pension funds that are wanting to do more explicit management of international assets.

Wardley Investment Services International Ltd., New York, had the most new net business in 1989 among the smallest firms in the Scorecard groupings, those with less than $250 million in total U.S. tax-exempt assets under management.

Wardley netted $100 million in new international business in 1989.

Deborah George, Wardley executive vice president, said the firm's biggest chunk of business was in a regional South East Asian Equity Fund (excluding Japan) and an active diversified international equity portfolio.

"People have just had it with Japan," she said, "and our investors recognize that being an active manager (in Southeast Asia) makes a lot of sense because these markets are inefficient and are growing with new issues in smaller marketplaces."

Even though the active managers are making inroads, and they could outperform indexers in the 1990s, Wells Fargo's Ms. Dunn expects international indexing to remain a growing field.

"International indexed funds are not marketed on the basis of performance as a rationale," she said. "There will be a role for international indexing regardless of future performance." ■

Core portfolio pitch keeps assets rolling

By Terry Williams

Institutional investors believed real estate managers' claims that suitable core portfolio properties are still available, even in a down market.

The proof? Five of the top 10 real estate managers in *Pensions & Investments*' annual Scorecard Survey have bought, plan to buy or historically are buyers of core portfolio properties.

Scorecard tracks the net gains — excluding capital appreciation — of managers' U.S. institutional tax-exempt assets for the year.

The managers' confidence in the availability of suitable core properties, however, is tempered by the realization it won't be easy.

David Hodes, a director with The Yarmouth Group in New York, said there are opportunities to buy, and the firm could satisfy its clients' demand for good property in three to five years.

"It's not getting any easier and property isn't getting any cheaper," he said. But Yarmouth's clients will be patient, according to Mr. Hodes. A pension fund that makes a separate account commitment of $200 million doesn't say the clock is ticking, he said.

"I am not a proponent of the belief that you buy simply to put money to work," Mr. Hodes said. "We tell people, 'If you are looking to put money to work in six months, don't hire us.' "

All but $200 million of the $1.135 billion The Yarmouth Group raised in 1989 is from separate account arrangements, according to Mr. Hodes. The company will buy offices, regional malls and industrial buildings in central business districts.

Equitable Real Estate Investment Management Inc., New York, raised a net of $1.194

See **Portfolio** *on page 20*

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Portfolio

Continued from page 19

billion, the most in the survey and No. 1 for the second straight year.

All of the money has been invested, said George Puskar, chairman.

Among the properties bought by Equitable for its clients were two large office buildings in Hawaii and the Trillium, a Los Angeles office building that was bought for the California Public Employees' Retirement System.

Equitable's open-end commingled Prime Property Fund paid $250 million for regional malls. The company also bought $260 million worth of industrial warehouse property, according to Mr. Puskar.

"It's difficult to invest in industrial-warehouse properties unless you have a field operation that can handle a lot of small deals," Mr. Puskar said. "We think we have access that is unparalleled."

David Glickman, president of Heitman Advisory Corp., Chicago, said the $700 million his firm netted also has been invested.

The money was invested in regional malls, industrial parks and selected office buildings, all of which were substantially leased, Mr. Glickman said. A small amount of pre-development land also was bought.

About 25% of the new assets came through Heitman's Group Trust, a closed-end fund, Mr. Glickman said. The rest was from separate account arrangements.

John Emmanuel, senior vice president with Schroder Real Estate Associates, New York, said the firm would have no problem investing its clients' money within 12 months because it is not looking for the trophy property segment of the market.

The firm looks to add value to the properties it acquires.

Schroder raised $200 million in 1989 through two funds.

According to Mr. Emmanuel, its closed-end fund will acquire three to five underutilized shopping centers, office buildings or industrial warehouses in secondary and tertiary markets.

"We would have no problem investing within a 12-month period," Mr. Emmanuel said. "We are not looking at the trophy property segment of the market.

"We are looking at properties that would present difficulties to some people — properties that require property and construction management.

"There will be a good abundance of investment opportunities."

Carl Mayer Jr., a principal with Karsten Realty Advisors, Los Angeles, said most of the $253 million the firm took in during 1989 was a result of pension funds turning over existing real estate portfolios to it.

That's because consultants and pension executives are taking a harder look at returns, Mr. Mayer said. He noted Karsten, which has a reputation as a workout specialist, is a finalist in six new manager searches.

"They are going to make changes if things aren't corrected," he said. ■

SCORECARD

Most new indexed fund business (net)

($ millions)

Firm	Total	Equity	Fixed Income
Bankers Trust	3,548	3,132	416
State Street Bank & Trust	2,514	2,195	319
Wells Fargo Investment	1,313	1,476	—
BEA Associates	1,018	1,018	0
Boston Co.	832	246	586
Lincoln Capital	419	0	419
Atlantic Portfolio Analytics	417	0	417
Ryan Labs	412	0	412
Fidelity Mgmt. Trust	369	190	179
Pacific Investment	345	345	0

Survey

Continued from page 1

ment Co., Newport Beach, Calif., and Lincoln Capital Management, Chicago, which are largely in fixed income, and Delaware Investment Advisers, Philadelphia, primarily in active, value-oriented equity management.

Among firms with $1 billion to $10 billion under management, the two top gainers were guaranteed investment contract managers, PRIMCO Capital Management Inc., Louisville, Ky., and Morley Capital Management Inc., Lake Oswego, Ore.

"It's obvious PRIMCO and Morley are picking up on the move outside on GICs," Mr. Eager said.

GIC portfolio management also was a major factor in the growth of three of the top 10 managers in the more than $10 billion category — Fidelity Institutional, Bankers Trust and State Street Bank.

Fidelity Institutional, set up this past year to serve defined contribution plans, had slightly more than $3 billion in GIC business, representing more than half of its net gain of $5.6 billion. Bankers Trust had $997 million in GIC management and State Street Bank, $859 million.

As GIC portfolios have grown, more pension executives have decided to hire money managers to select contracts, said Jim Bowhers, senior vice president of Fidelity Institutional.

The rest of the top-gaining managers in the $1 billion to $10 billion group were a mixed bag, including Goldman, Sachs Asset Management, New York, primarily a quantitative fixed-income manager; BEA Associates Inc., New York, which drew most of its gain from indexed equity management; The Yarmouth Group, New York, a real estate specialist; and Eagle Asset Management, St. Petersburg, Fla., and GAMCO Investors Inc., New York, both active equity managers.

Eagle and GAMCO are hot primarily because they've had excellent performance, as did another in this group, fixed-income specialist Western Asset Management Co., Pasadena, Calif., Mr. Jones said.

International/global specialists led firms in the $250 million to $1 billion category, with Hill Samuel Investment Advisers Ltd., Minneapolis, and Boston International Advisors Inc. finishing first and second respectively.

Both firms have promoted themselves successfully and have had good performance as well, Mr. Jones noted. Hill Samuel is somewhat quantitative, while Boston International is highly quantitative, he said.

Some others in this size category — Consistent Asset Management Co. and Brandywine Asset Management, both of Wilmington, Del., and Morgan Stanley Asset Management The Chicago Group, Chicago — appear to have gained popularity primarily on the strength of performance, Mr. Jones said.

Leading the category of firms with less than $250 million under management was Spare, Tengler,

See **Survey** *on page 22*

SCORECARD

Most new international/global business (net)

(total of equity and fixed-income)

Top managers over $10 billion

Firmm	$ millions
Wells Fargo Investment	2,420
State Street Bank & Trust	1,852
Capital Guardian Trust	850
Fidelity Mgmt. Trust	827
Brinson Partners	727
Bankers Trust	726
Prudential Asset Mgmt.	345
Boston Co.	229
GE Investments	125
INVESCO Capital	99

Top managers $1 billion to $10 billion

Firm	$ millions
Nomura Capital	612
Baring International	530
Oechsle International	474
Schroder Capital	446
Warburg Investment	343
Rowe Price-Fleming	307
County NatWest Investment	247
Morgan Grenfell Investment	184
BEA Associates	183
TIMCO	127

Top managers $250 million to $1 billion

Firm	$ millions
Hill Samuel Investment Advisers	469
Boston International Advisors	454
HD International	272
Marsh & Cunningham-Castegren	212
SBC Portfolio Mgmt.	185
Nikko Capital	141
Parametric Portfolio Associates	117
Julius Baer	113
Dunedin Fund	113
First Nat'l Bank-Omaha	80

Top managers under $250 million

Firm	$ millions
Wardley Investment Services	100
InterQuant Capital Advisors	80
Emerging Markets	64
Kleinwort Benson International	24
Brandes Investment	23
Credit Suisse	15
Oak Hall Capital Advisors	12
Guild Investment	2

Most new balanced business (net)

Top managers over $10 billion

Firm	$ millions
Fischer, Francis, Trees & Watts	1,180
Fidelity Institutional	807
Manufacturers Nat'l Bank-Detroit	441
J.P. Morgan	397
INVESCO Capital	350
Oppenheimer Capital	300
Boatmen's Trust	296
Boston Co.	122
Brinson Partners	91
Capital Guardian Trust	76

Top managers $1 billion to $10 billion

Firm	$ millions
First Quadrant	950
McMorgan	345
Fiduciary Mgmt. Associates	240
Midlantic Nat'l Bank	168
Dodge & Cox	146
AMR Investment	100
Dillon, Read Capital	83
Munder Capital	76
Shearson Asset Mgmt.	76
Wolf, Webb, Burk & Campbell	64

Top managers $250 million to $1 billion

Firm	$ millions
JCW Investments	441
Federated Investment Counseling	185
Beacon Capital	162
Morgan Stanley-Chicago Group	122
Sirach/Flinn, Elvins Capital	118
Signet Asset Mgmt.	111
WEDGE Capital	99
Unity Mgmt.	65
American Asset Mgmt.	58
Ashfield & Co.	58

Top managers under $250 million

Firm	$ millions
Paine Webber Asset Mgmt.	60
Fox Asset Mgmt.	45
Seaboard Investment	43
Kanawha Capital	38
RXR Capital	34
Home Capital Services	21
Spare, Tengler, Kaplan & Bischel	20
Stuyvesant Capital	18
ICM Asset Mgmt.	16
Marathon Asset Mgmt.	16

Most new real estate business (net)

Top managers over $10 billion

Firm	$ millions
Equitable Real Estate	1,194
J.P. Morgan	421
Boston Co.	150
Metropolitan Life	132
GE Investments	80
State Street Bank & Trust	59
Brinson Partners	3
Manufacturers Nat'l Bank-Detroit	2
Boatmen's Trust	1

Top managers $1 billion to $10 billion

Firm	$ millions
Yarmouth Group	1,135
JMB Institutional Realty	796
Heitman Advisory	700
Lehndorff & Babson Real Estate	553
Copley Real Estate Advisors	445
PSI Institutional Realty Advisors	190
Latimer & Buck	135
McMorgan	130
O'Connor Group	125
Property Capital Associates	123

Top managers $250 million to $1 billion

Firm	$ millions
Dreyfus Realty Advisors	260
Karsten Realty Advisors	253
Schroder Real Estate	200
Piedmont Realty Advisors	120
MIG	116
Bennett & Kahnweiler Realty	54
PMRealty Advisors	52
McMahan Real Estate	46
JCW Investments	7

Top managers under $250 million

Firm	$ millions
Mid-Atlantic Realty Advisors	182
AMB Institutional Realty	136
Lincoln Asset Mgmt.	130
Metric Institutional Realty	86
EAI Resource Investments	59
Smith Barney Birtcher Realty	53
Liquidity Fund	15
Hayden, Tolzmann & Associates	12
Lieberman Cos.	6
Acquest Capital	4

Harvard, Merrill Lynch trade barbs in court

By Trudy Ring

BOSTON — Merrill Lynch, Pierce Fenner & Smith Inc. has moved for dismissal of a suit brought against it by Harvard University.

Harvard, in turn, has filed a memorandum in opposition to the motion.

Harvard sued the Merrill Lynch & Co. unit for $135 million in damages, alleging misrepresentation in advice to invest in remarketed notes issued by Lomas Financial Corp., Dallas, and underwritten by Merrill Lynch Capital Markets (*Pensions & Investments*, Nov. 27).

Harvard Management Corp., which oversees the university's $5 billion endowment fund, in May bought $45 million of the notes, part of a $300 million private placement. In September, Lomas defaulted on the notes and filed for protection under Chapter 11 of the Federal Bankruptcy Code.

In a memorandum in support of the motion for dismissal, filed Dec. 26 in U.S. District Court in Boston, Merrill Lynch said it did not misstate or omit material facts about Lomas, as alleged in Harvard's suit.

"Virtually all of Harvard's allegations fail to state a claim under the federal securities laws because each purported 'fact' either (1) was not a fact, but an opinion, prediction or 'puffing'; (2) was disclosed; or (3) need not have been disclosed," the Merrill Lynch memorandum said.

Courts consistently have held that statements of opinion, prediction or the "puffery" of salespeople are not actionable under securities laws, the filing said.

"The alleged misstatements of Merrill Lynch and LFC (Lomas) to the effect that the remarketed notes were a sound investment and that LFC's prospects were bright are of the same sort held to be not material in these cases," the memorandum said. "That a sophisticated institutional investor such as Harvard would base its investment decision on alleged statements by Merrill Lynch that it 'felt very positive about Lomas' and that 'if the notes were not a good program Merrill Lynch would not be bringing it to market' is disingenuous at best."

Harvard, in its memorandum filed Jan. 16, contended Merrill Lynch made material misstatements of fact, not opinions, predictions or puffery.

"Merrill Lynch thus characterizes as mere opinion and prediction even misstatements that the remarketed notes were 'as liquid as commercial paper' and 'of investment grade;' that the auction mechanism assured resale of the notes on the rollover date; that 'each division of Lomas is well-capitalized;' and that 'operating cash flows are more than adequate to service its projected interest, dividend and other administrative requirements.' "

Also, certain opinions and predictions are actionable by law, the Harvard filing said.

Merrill Lynch's filing contended facts it allegedly withheld about Lomas' finances were indeed disclosed or were available publicly in documents filed with the Securities and Exchange Commission. "Had Harvard bothered to read the information Merrill Lynch provided to it, or attempted to obtain the information LFC and Merrill Lynch invited it to review, it would have known the very information it now asserts was not disclosed," the filing said.

Harvard's filing responded that a general reference to the SEC filings does not absolve Merrill Lynch of liability for misstatements and omissions; the filings in question contain misrepresentations themselves. Also, Merrill Lynch imputes to Harvard an obligation to investigate Lomas by reviewing SEC filings — an obligation that does not exist under securities law, the memorandum said. ■

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Survey

Continued from page 20

Kaplan & Bischel Inc., San Francisco, which drew $205 million last year. The firm was formed last summer by a group of professionals from San Francisco-based Merus Capital Management, and the $205 million all came from former Merus clients, said Nancy Tengler, principal. A total of $185 million was for equity accounts and $20 million for balanced management; the firm's equity strategy focuses on dividend yield.

Since the beginning of 1990, the firm has drawn $20 million that did not come from a Merus relationship, Ms. Tengler said.

JCW Investments Inc., Brea, Calif., one of the top firms in the $250 million to $1 billion category, also was a start-up, founded by principals who left Trident Investment Management Inc., Anaheim, Calif. The bulk of JCW's 1989 asset flow was for balanced management.

Other firms in the less than $250 million size category that made the top 10 by attracting their first tax-exempt assets in 1989 were Mid-Atlantic Realty Advisors, Pittsburgh; AMB Institutional Realty Advisors, San Francisco; Lincoln Asset Management Co., Dallas, also a real estate firm; and Paradigm Partners Inc., Bellevue, Wash., an investor in hedge funds and other alternative vehicles.

In the $250 million to $1 billion category, firms in the top 10 that started the year with nothing were fixed-income indexing specialists Atlantic Portfolio Analytics & Management Inc., Orlando, Fla., and Ryan Labs Inc., New York. ■

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STATISTICALLY SPEAKING

GIC rates fell in '89, but quality gap grew

By Fred Williams

Rates on guaranteed investment contracts declined during most of 1989 in tune with the overall decline in interest rates, but quality spreads over Treasury instruments with similar maturities widened to levels not seen for more than a year.

"The biggest thing about 1989 was the improvement in spreads. Spreads contracted almost all of 1988 and expanded almost all of 1989," said Ned Schmidt, president of Schmidt Management Co., Tulsa, Okla., a guaranteed investment product market research and consulting firm.

"The average spread went from a couple of basis points in January 1989 to about 40 basis points on average for all contracts in one- to 10-year maturities."

On a three-year contract, the average spread increased from 2 basis points in December 1988 to 33 basis points in December 1989, according to Mr. Schmidt. On a five-year contract, the spread increased from 19 basis points in to 53 basis points.

The widening spreads, which reached 75 to 80 basis points on three-year contracts and up to 100 basis points on five-year contracts in the final quarter of 1989, "are spreads we haven't seen in over a year," said John Knight, president of Lamberson Knight GIC Inc., Short Hills, N.J. "Spreads like that increase the interest and activity by buyers in the GIC market, and we saw that last year."

In addition, he said, the capacity problem experienced by insurance carriers in previous years was not as noticeable during 1989 "largely because of the availability of investments for insurance companies. The carriers also did a more adequate job of allocating contracts in a more orderly fashion during the year."

Insurance company rate quotations on representative five-year, single-deposit, simple interest, $1 million GICs as of Dec. 29, and Sept. 29, 1989 as provided by Lamberson Knight GIC Inc., Short Hills, N.J. and GIC Inc., Beaverton, Ore., are:

- Allstate Life Insurance Cos., Northbrook, Ill.: Dec. 29, 8.51%; Sept. 29, 9.01%.
- Canada Life Assurance Co., Toronto: 8.34%; 8.75%.
- Confederation Life Insurance Co., Atlanta: 8.75%; 8.95%.
- Connecticut Mutual Life Insurance Co., Hartford: 8.22%; 8.95%.
- Continental Assurance Co., Chicago: 8.34%; 8.79%.
- Crown Life Insurance Co., Toronto: 8.46%; 8.6%.
- Hartford Life Insurance Co., Hartford, Conn.: 8.58%; 8.72%.
- Home Life Insurance Co., New York: 8.19%; 8.53%.
- John Hancock Mutual Life Insurance Co., Boston: 8.53%; 8.84%.
- Life Insurance Co. of Virginia, Richmond: 8.39%; 8.82%.
- Lincoln National Pension Insurance Co., Fort Wayne, Ind.: 8.6%; 8.91%.
- Minnesota Mutual Life Insurance Co., St. Paul: 8.26%; 8.84%.
- Mutual Benefit Life Insurance Co., Newark, N.J.: 8.55%; 8.38%.
- Mutual of New York, New York: 8.49%; 8.64%.
- New York Life Insurance Co., New York: 8.5%; 8.75%.
- Ohio National Life Insurance Co., Cincinnati: 8.61%; 8.97%.
- Pacific Mutual Life Insurance Co., Newport Beach, Calif.: 8.01%; 8.31%.
- Pan American Life Insurance Co., New Orleans: 8.59%; 8.98%.
- Penn Mutual Life Insurance Co., Philadelphia: 8.58%; 8.89%.
- Phoenix Mutual Life Insurance Co., Hartford: 8.31%; 8.69%.
- Provident Mutual Life Insurance Co., Philadelphia: 8.01%; 8.67%.
- Provident National Life Assurance Co., Chattanooga, Tenn.: 8.5%; 8.01%.
- Southwestern Life Insurance Co., Dallas: 8.57%; 8.8%.
- State Mutual of America, Worchester, Mass.: 8.44%; 8.85%.
- United of Omaha Insurance Co., Omaha, Neb.: 8%; 8.63%.

William M. Mercer Meidinger Hansen Asset Planning Inc., Northbrook, Ill., surveys insurance companies for rate quotations and provided the following summary of various bullet GICs for December 1989:

- Three-year, $1 million, compound: high, 8.67%; low, 7.57%; average, 8.14%.
- Three-year, $1 million, simple: high, 8.67%; low, 7.52%; average, 8.12%.
- Five-year, $1 million, compound: high, 8.85%; low, 7.78%; average, 8.36%.
- Five-year, $1 million, simple: high, 8.75%; low, 7.75%; average, 8.33%.
- Seven-year, $1 million, compound: high, 8.87%; low, 7.85%; average, 8.44%.

See **Rates** on page 26

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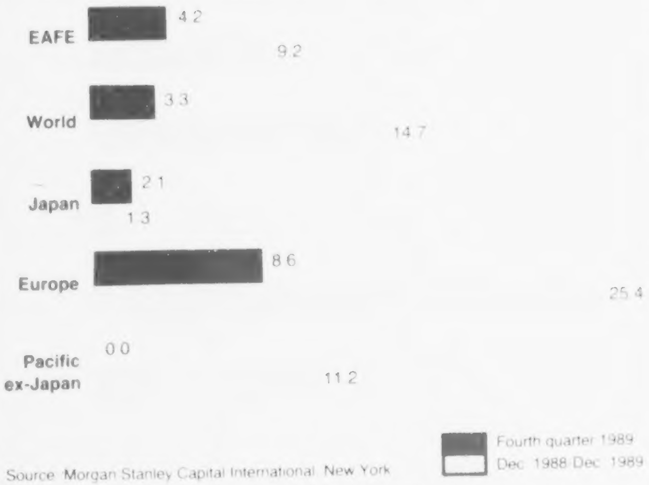
SEI

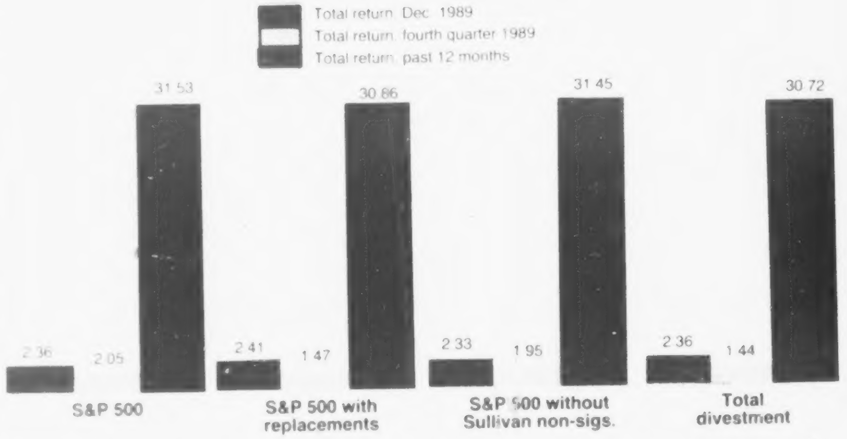
Morgan Stanley Capital International worldwide indexes



Source: Morgan Stanley Capital International, New York

Indexes are in U.S. dollar terms without dividends reinvested

South Africa Free Index

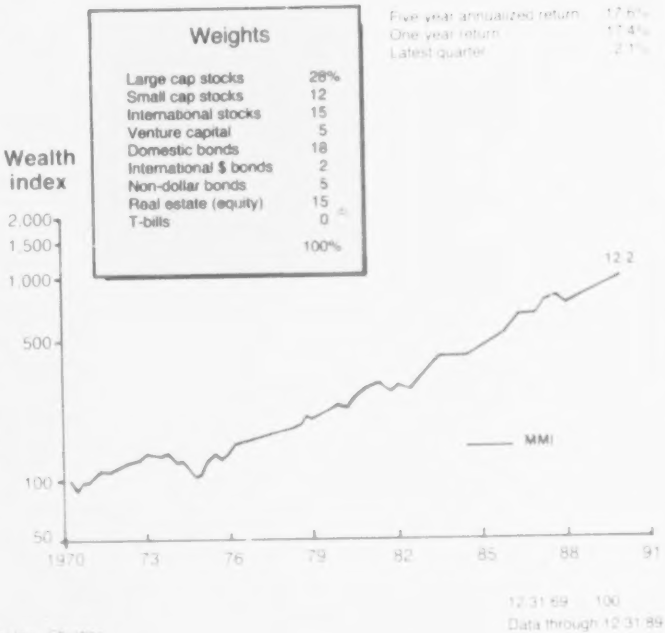


S&P 500 with replacements: replaces a South Africa-related company with next largest company in the industry. **S&P 500 without Sullivan non-signatories:** excludes 6 companies, no replacements. **Total divestment:** eliminates all companies with South Africa involvement, no replacements.

Source: Wilshire Associates, Santa Monica, Calif.

Multiple Markets Index

The Multiple Markets Index is a benchmark for total portfolio returns. It is composed of eight asset classes used by retirement plan executives; it is calibrated to reflect the same degree of risk of the typical pension portfolio; it uses passive fixed policy weights; and it represents the individual asset classes by the broadest and most complete market return data available.



Weights

Large cap stocks	28%
Small cap stocks	12
International stocks	15
Venture capital	5
Domestic bonds	18
International $ bonds	2
Non-dollar bonds	5
Real estate (equity)	15
T-bills	0
	100%

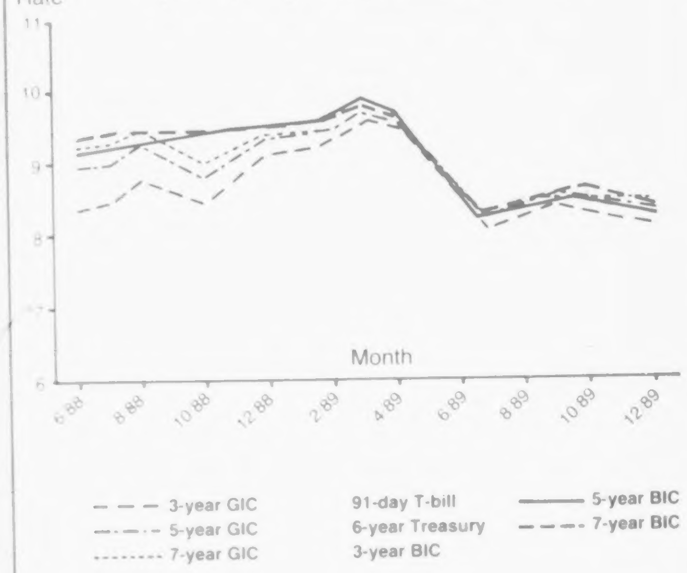
Five year annualized return	17.6%
One year return	17.4%
Latest quarter	2.1%

12/31/69 = 100
Data through 12/31/89

Source: Brinson Partners Inc., Chicago

Summary of average GIC & BIC data vs. market yields

(Bullet, compound $1 million contract)



Source: Mercer Meidinger Hansen Asset Planning Inc., Chicago

Fourth quarter 1989 returns

	Russell 3000®	Russell 1000®	Russell 1000® by market capitalization				Russell 2000®
			Large	Medium/large	Medium	Medium/small	
Technology	1.3%	0.9%	0.0%	3.5%	1.0%	2.0%	4.5%
Health care	6.2	6.9	7.2	9.8	7.0	1.6	0.5
Consumer discretionary	4.1	3.7	0.0	4.3	2.9	7.2	8.1
Consumer staples	4.3	4.5	5.4	3.8	4.3	1.3	3.0
Integrated oils	11.7	11.8	13.2	3.7	4.1	2.2	15.9
Other energy	9.0	8.7	NA	6.4	10.3	11.6	11.5
Materials and processing	0.8	0.1	7.0	3.6	0.0	2.5	6.0
Producer durables	1.6	0.9	6.9	0.5	8.1	6.5	8.3
Auto and transportation	9.7	9.8	10.2	7.6	11.5	10.1	8.6
Financial services	7.5	7.4	3.7	8.7	6.8	8.7	9.7
Utilities	8.5	8.7	9.6	8.7	7.2	6.7	2.3
Total	0.7	1.2	5.1	0.6	1.0	3.3	4.9

Source: Frank Russell Co., Tacoma, Wash.

New market a challenge

Study alerts U.S. firms to dynamics of Europe 1992

By Leonard J. Hollie

PHILADELPHIA — Europe 1992 will create the largest single market in the world, and U.S. multinational companies must learn how to take advantage of the freer movement of goods, services, capital and people in a more competitive atmosphere, warns a study from the Wharton School of the University of Pennsylvania.

"Proper timing is the key," concludes Peter Lorange, a professor of multinational management at Wharton. He co-authored the study, "1992 — A Single European Market Management Challenges for Multinational Companies," with two European professors: Gottfried Becker, assistant professor at the University of Siegen, West Germany, and Vittorio Lusvarghi, assistant professor at the University of Modena, Italy.

The study advises multinational companies to take an active role in the evolution of the European Common Market to ensure the laws that eventually govern Europe will be compatible with their business strategies in other parts of the world.

The report also recommends other strategies to help U.S. companies adapt to the changes brought on by a unified European economy.

The authors stress accurate information is the key.

They say U.S. multinational corporations should make use of their presence already established in Europe and appoint European experts to strengthen information gathering capabilities for monitoring single-market developments.

The report also recommends striking a balance between understanding the challenges of the broader European economy and those of the individual local markets.

"The European Community will never represent one set of consumer tastes," according to the report. "While it offers opportunities for unification within this diversity of product market preferences, it will require an active presence to gain sufficient understanding to receive benefits from both a broadened European Community strategy and from the necessary adaptation to local circumstances."

The unification of the markets may lead to a realignment of production and could reduce the cost of manufacturing as well as the costs of patents, development, storage, transportation and distribution.

"The single market will offer to small- and medium-size firms, both European and non-European, easier access to the entire European market," the authors said. "They will win by standardization of and fewer barriers to the national markets."

U.S. companies also should adopt an active stakeholder approach to lobby for input in the Common Market's evolution, not only in Brussels but also in those countries where the companies' headquarters and subsidiaries are located.

The authors said one misconception about 1992 is that it will be achieved by the end of 1992. In reality, it could take a full generation to implement such dramatic changes effectively.

"1992 is not a D-Day, but a milestone in an ongoing process, as Europe evolves into one integrated, inner market," the report concluded. ▪

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Rates

Continued from page 24

- Seven-year, $1 million, simple: high, 8.81%; low, 7.94%; average, 8.41%.
- Three-year, $5 million, compound: high, 8.67%; low, 7.75%; average, 8.2%.
- Three-year, $5 million, simple: high, 8.67%; low, 7.64%; average, 8.17%.
- Five-year, $5 million, compound: high, 8.85%; low, 7.85%; average, 8.4%.
- Five-year, $5 million, simple: high, 8.84%; low, 7.7%; average, 8.37%.
- Seven-year, $5 million, compound: high, 8.92%; low, 7.9%; average, 8.49%.
- Seven-year, $5 million, simple: high, 8.87%; low, 7.75%; average, 8.44%.

Schmidt Management has developed a guaranteed product index for performance measurement purposes. The Schmidt GIC composite index approximates the return of a continuous, equally weighted investment in one- to 10-year original-maturity GICs. (The index shows returns, not rates.)

Total returns for the quarter and 12 months ended Dec. 29 were 2.37% and 10.22% respectively. In comparison, the Standard & Poor's 500 Stock Index returned 2.06% and 31.55%, the Merrill Lynch Government/Corporate (Bond) Master Index returned 3.49% and 14.11%, and 90-day T-bills, 2.1% and 8.89%.

Mercer Meidinger Hansen also surveys banks for rate quotations on their guaranteed instruments. Rate quotes for one- and three-year bullet BICs for December were:

- One-year, $1 million, compound: high, 8.14%; low, 7.57%; average, 7.88%.
- One-year, $1 million, simple: high, 8.14%; low, 7.61%; average, 7.94%.
- One-year, $5 million, compound: high, 8.14%; low, 7.52%; average, 7.89%.
- One-year, $5 million, simple: high, 8.2%; low, 7.81%; average, 8%.
- Three-year, $1 million, compound: high, 8.45%; low, 7.89%; average, 8.19%.
- Three-year, $1 million, simple: high, 8.45%; low, 8.08%; average, 8.24%.
- Three-year, $5 million, compound: high, 8.5%; low, 8%; average, 8.19%.
- Three-year, $5 million, simple: high, 8.5%; low, 8.08%; average, 8.26%. ▪

Defense

Continued from page 3

Corp., which have a technological edge in surveillance and arms verification. Investors view these companies as a niche opportunity because changes in Eastern Europe likely will require defense equipment for monitoring rather than outright conflict.

E-Systems and Loral are two stocks included in the growth stock portfolio of the $22 billion Teacher Retirement System of Texas, Austin, said Harold Meyers, an equity research analyst with the system.

Many institutions are buying stock in defense companies with diversified operations — such as **Martin Marietta Corp.** — and ones with commercial as well as military ties — including **United Technologies Corp.** and **Boeing Co.**

These companies are better positioned to ride out market pessimism capped by the crumbling Berlin Wall and defense cutbacks, analysts say, while traditional "metal benders" — **Grumman Corp.** and Lockheed among them — are less diversified and poorly positioned to overcome cash flow constraints.

Contractors have suffered because they spent more money to develop programs than the government's fixed-price development contracts provided, and because government progress payments have not kept pace with the costs companies have incurred.

Rather than outright retreat, however, some institutional investors are taking advantage of the relatively low market valuation of aerospace and defense companies in general to grab specific stocks.

"Our defense exposure since September has been increasing because we do see a contrarian story here," said Mr. Ubben at Fidelity.

Fidelity's largest exposure is in United Technologies, a good example of a company that has been hurt by industry pessimism but is poised for commercial growth, Mr. Ubben said.

"United Technologies is one of the more attractive stocks in the so-called aerospace defense industry because it has been affected by the negative psychology affecting the defense stocks," Mr. Ubben said. Fidelity held about 3 million shares of United Technologies as of Sept. 30, according to CDA Investment Technologies Inc., Rockville, Md.

While real government defense spending is likely to decline 3% to 5%, Mr. Ubben said, United Technologies unites a host of factors that make it a desirable investment — low stock price, strong commercial capabilities and projected earnings growth due to a scaled-back military component.

"You've got growing earnings, a lot of which is due to military business which generates lower losses," Mr. Ubben said. Last week, United Technologies raised its quarterly dividend 12.5% to 45 cents per common share from 40 cents.

He said United Technologies is winding down its Norden Systems radar division, which lost about $150 million in 1989, while its Pratt & Whitney division, which manufactures aircraft engines and spare parts, is strong. Pratt & Whitney reported a backlog in excess of $11 billion in 1989 to be filled during the next three to five years.

Raytheon Co., with 40% of its sales coming from its commercial component, "will show improved margins and decent earnings growth," Mr. Ubben predicted.

Boeing's consolidation of its military operations, coupled with its $85 billion backlog, has made it a favorite of many institutional investors.

Last week, Boeing reported earnings of $973 million despite an operating loss of $474 million for the military and space operations.

"They had a major military loss and yet the commercial margins expanded sequentially on strike-depressed revenues," said William L. Kitchel, investment officer and analyst at Massachusetts Financial Services, Boston, which has been investing in the commercial aerospace sector for two years.

"We've made big bets" in Boeing and United Technologies, Mr. Kitchel said. "I don't think (Wall Street) appreciates the potential surge in profits.

"Yes, airline cancellations are a nagging worry, but in terms of the backlog, this is the first time we've had a replacement cycle," he explained. Orders for commercial aircraft are up because airplanes that were designed to have a life of 25 to 30 year now need to be replaced.

Last week, Boeing reported orders of 963 commercial transport aircraft valued at $47.5 billion, a dollar record for the fifth straight year.

Peter L. Aseritis, director and aerospace defense electronics analyst with First Boston Corp., New York, said Boeing is a good example of a defense company that is well positioned to ride out current market pessimism.

"The defense industry generally doesn't look solid, but we also think that there are certain individual companies that could do OK," Mr. Aseritis said.

He forecasts continued growth in Boeing's commercial business, which most likely will benefit if travel demands grow in Eastern Europe and spark new orders from Eastern European air carriers that want more modern transport than is available from Soviet manufacturers.

Although the strong outlook for peace and defense budget cuts make investing in defense companies generally undesirable, Mr. Aseritis has singled out Martin Marietta as a good investment because its market valuation is well below comparable companies. In addition, its backlog grew to $13.4 billion in 1989, up 20% in a year.

Texas Teachers' Mr. Meyers said his fund is maintaining its 2% weighting in five defense and aerospace stocks: **Rockwell International Corp.**, **TRW Inc.**, Boeing, Martin Marietta and Raytheon — that are well diversified and have strong management.

The $20.033 billion State of Wisconsin Investment Board, Madison, has decreased its exposure in defense but increased its holdings in commercial aerospace companies, which are relatively cheap these days, said John Nelson, investment director-special equities. The outlook for defense "is not very good," Mr. Nelson said, but "commercial aerospace looks extremely strong, and unfortunately there are a lot of companies that split the business." ■

EPS rising among defense companies

(EPS estimates as of Dec. 29)

	Fiscal '89	Fiscal '90
Boeing	3.00	5.65
E-Systems	2.70	3.10
General Dynamics	7.10	7.30
Geodynamics	1.17a	1.30
GM Hughes Elec.	1.90	2.20
Hexcel	1.25	1.70
Lockheed	0.25	5.50
Logicon	2.45v	2.65v
Loral	3.13v	3.90v
Martin Marietta	5.95	6.45
McDonnell Douglas	1.00	5.00
Raytheon	8.10	9.00
Rockwell Int'l	2.47a	2.45
Tech-Sym	1.00	1.25
Watkins-Johnson	2.12	2.60

A-Actual

V-Data refers to fiscal year ending one year later than column heading

Source: The First Boston Corp., New York

Labor

Continued from page 1

ment staff doesn't have the "background, training or mentality" to conduct criminal investigations.

Also, Mr. Maria told a House subcommittee he plans to review the department's enforcement record in dealing with proxy voting issues and would "very probably" end up examining investment managers' voting records.

Mr. Maria later added his office would examine a proxy-voting survey conducted by the department last year, which revealed more than one-third of money managers failed to vote their proxies. Mr. Maria said he is particularly concerned about potential conflicts of interest that money managers face dealing with corporate executives and their clients.

The Labor Department also is developing a legislative package to boost ERISA enforcement that threatens to add to employer costs.

In particular, the department is considering increasing the ability of private plan participants to sue employers and others over misuse of pension assets, and payment of bounties to informants. Sources said awards of treble damages and attorney's fees to plaintiffs are being discussed.

In addition, the department is reviewing proposals, urged by Mr. Maria, to toughen auditing standards, such as requiring peer review of auditors and forcing accountants to test plans for compliance with ERISA.

One change likely to occur would be elimination of "limited-scope audits," which exempt plan assets managed by banks and insurance companies from being audited for ERISA violations.

Sens. Nancy Kassebaum, R-Kan., and Orrin Hatch, R-Utah, recently introduced legislation prohibiting limited-scope audits.

The department faces a March 15 deadline on submitting its recommendations to a House Government Operations subcommittee.

Before the House Labor-Management Relations Subcommittee Jan. 31, Mr. Maria argued the department's recent efforts, while praiseworthy, were not enough.

In particular, he claimed the department's enforcement staff is not trained to detect professional racketeers and that computerized targeting of the annual Form 5500 data would not ferret out "willful, malicious acts."

Mr. Maria pointed to abuses in multiple employer welfare arrangements, or MEWAs, which are medical insurance plans marketed to small employers, often at below-market rates. In cases of abuse, these plans charge heavy up-front management fees and later fail to have adequate resources to pay out claims.

State regulators have run into problems pursuing these operators, Mr. Maria said, because they say ERISA pre-empts local law. While this legal defense is wrong, the Labor Department has failed at providing assistance to local officials, he said.

Mr. Ball acknowledged MEWAs are "particularly susceptible to abuse," but said their regulation belongs in the realm of the states. Nevertheless, the Labor Department is working at aiding state officials on MEWA issues and is considering requiring the trusts to file reports or registration statements with the department, he said.

The administration's proposal to permit transfers of surplus pension assets to 401(h) retiree medical accounts is expected to raise $800 million in revenue in three years, as employers using the transfer do not take deductions for retiree-health payments, although in the long run they will have to boost their pension contributions to make up for the amounts transferred.

Last year, the Treasury Department expressed reservations about transfer proposals, worrying about the long-term revenue costs and the equity of allowing pre-funding of retiree health benefits for a small group of employers.

But the administration appears willing to try a transfer on a trial basis. A Treasury Department paper explained the proposal would enable officials "to evaluate the effectiveness and the long-term revenue effects of this approach to satisfy retiree health care liabilities."

The administration's plan was most like one proposed by the House Ways and Means Committee last year, but does not include a controversial rule requiring employers to purchase annuities for all accrued pension liabilities in order to effect a transfer. All accrued pension benefits, however, would have to be vested.

The latest proposal would permit employers to transfer pension assets exceeding 140% of current pension liabilities to cover retiree medical expenses. It was not clear if the amount of transferred assets would be limited to one year's medical expenses. Transfers would be allowed only in 1991 and 1992.

The narrowness of the proposal will limit employer interest. "There will be some employers who do it, but it's not very attractive" to many, said John Woyke, a principal with TPF&C, New York.

The provision has a long row to hoe. Pension experts anticipate Sen. Howard Metzenbaum, D-Ohio, again will try to link any retiree-health transfer legislation to his bill restricting the ability of employers to recoup surplus assets from terminated pension plans. The senator's efforts caused a retiree-health transfer provision to be dropped from last year's budget bill. ■

Market

Continued from page 2

the stock market decline a plus. Robert McLaughlin, investment officer for the $19 billion Ohio Public Employees' Retirement System, Columbus, said his fund would be better off if the real estate, equity and bond markets all declined. "We have a positive cash flow and we would rather buy assets at a more favorable price, and get dividends at a better yield," he said. The pension fund has $8 billion in equity investments, with $4 billion in stock and $4 billion in cash.

"The recent stock market decline has all the earmarks of the beginning of a bear market," he said. "Last year we were a net seller of $300 million in stocks. If stock prices are low this year, then we will buy. I think the stock market is beautiful right now."

Managers have neither raised cash nor found major bargains in this market. "We're basically positive," said Jack Sullivan, partner of Harris Bretall Sullivan & Smith Inc., San Francisco. Equity market valuations are under pressure, with interest rates going up and earnings expectations down, but the situation likely will reverse later this year, he said. The firm is fully invested in its equity accounts and the equity portions of its balanced accounts.

"We haven't heard from our institutional investors with any general concerns," said Peter Thompson, president and chief investment officer of David L. Babson & Co. Inc., Cambridge, Mass. "We tend to be fully invested all the time as a matter of policy, so they wouldn't be talking to us about moving out of the market."

The decline is a normal pullback and not unreasonable, he said. "The market is cyclical and we feel that this is one of the down cycles."

Brinson Partners Inc., Chicago, has had about 25% cash in its equity accounts since October, but it hasn't bought into the current market weakness, according to Jeffrey Diermeier, managing partner-U.S. equities. "It's our sense that the market is somewhere in the area of 10% to 15% overpriced," he said.

Mutual fund shareholders appear to have taken more money out of equities in January than they have put in. Stein Roe & Farnham Inc., Chicago, had net redemptions in equity mutual funds in January, a switch from net subscriptions to equities in December, said Marshall Front, executive vice president.

"It may well turn out that individuals again bought at the peak and sold after the horse was out of the barn," he said.

He added that although he couldn't yet quantify the January redemptions, they were modest by historical standards, as were the net subscriptions in December.

In addition to individual investors, Michael Metz, chief market analyst at Oppenheimer & Co. Inc., New York, said there has been some selling by foreign investors as the dollar has weakened. Also, players in takeover arbitrage and stock index arbitrage have been sellers.

Overall, however, volume has been low; there just aren't many people looking to buy stocks, Mr. Metz said. "The buyers have just walked away."

Harris Bretall's Mr. Sullivan also said foreign investors have been pulling out of U.S. equities, as their home markets have become more attractive.

Steven Einhorn, portfolio strategist at Goldman, Sachs & Co., New York, said while current sellers comprise a broad cross-section of investors, they're not being hasty. It "doesn't look like this is climactic selling," he said. "There isn't any panic. People aren't throwing stocks out the window." ■

NOTE

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February 19, 1990

Pensions&Investments

The Newspaper of Corporate and Institutional Investing

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AT DEADLINE

S&L deals put on hold

Worsening conditions among savings and loans have caused the $10 billion Los Angeles County Retirement Association to put on hold plans to invest $200 million in that industry.

The fund's initial decision to invest had been crucial in that it was the first fund to make a commitment to the two limited partnerships — WSPG International, and Blackstone Group and Old Stone Corp.

Kass joins J.P. Morgan

Dennis Kass, who left his post as pension chief for the Labor Department in 1987 to join Goldman, Sachs, has moved to J.P. Morgan, a Morgan spokesman confirmed. Further details could not be learned by press time.

L.A. Fire, Police hires

Trustees for the $3.5 billion Los Angeles Fire & Police Pension System have decided to place $50 million with its three new real estate investment advisers. The amounts, firms and investment areas are: $10 million, PSI Institutional Realty, mini-warehouses; $15 million, Fayez Sarofim Realty Advisors/Weingarten Realty Investors, neighborhood shopping centers; and $25 million, Copley Real Estate Advisors, industrial properties.

Joint venture formed

Alex. Brown Inc., Baltimore, and Kleinwort Benson Group PLC, London, have formed a worldwide real estate investment advisory joint venture, Alex. Brown Realty Advisors/Kleinwort Benson, Baltimore, managing $4 billion in tax-exempt assets.

Global realty deals eyed

Eight institutional investors from at least five countries have agreed to invest $2 billion in real estate in Europe, North America and Australia.

Five of the investors in the deal — put together by Prudential Insurance and Jones Lang Wootton — are: SPP, Stockholm, Sweden's largest money manager; Government of Singapore Investment Corp. PTE Ltd.; Nationale-Nederlanden NV, The Hague; Australian Mutual Provident Society, Sydney; and Prudential Life.

Diversification evident

The largest U.S. corporate pension plans are continuing their trend toward diversification.

A new asset allocation study by Greenwich Associates, indicates international and equity real estate received an increasing proportion of the assets of corporate funds. Passive investments among public pension funds rose three percentage points between 1988 and 1989. Use of actively managed common stocks continued its decline among both corporate and public plans.

Drexel fall shifts focus to insurers

Quality of other assets under scrutiny

By Marcia Parker and Hillary Durgin

The plunge of the junk-bond market, which brought about the demise of Drexel Burnham Lambert Inc., has prompted scrutiny of the quality of all the assets insurance companies use to back their pension annuities and guaranteed investment contracts.

The junk-bond plunge will have only a small impact on insurance industry annuities and GICs backing the pensions of millions of employees. Most annuities and GICs are supported by more than junk bonds.

So far, no retirement benefits have been lost because of the decline in value of the insurance industry's multibillion-dollar portfolios of junk bonds.

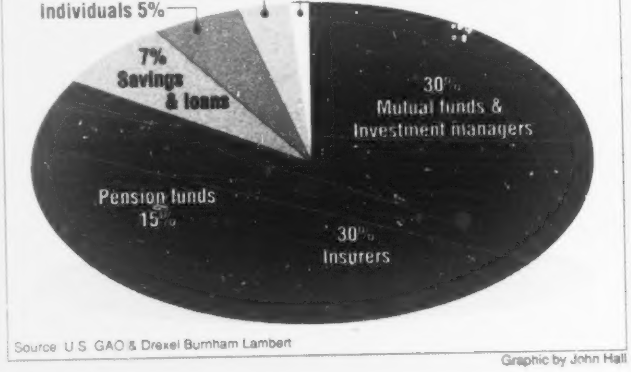
And while a complete collapse of the junk-bond market might trigger GIC or annuity defaults that would be devastating for thousands of beneficiaries of individual plans, it would not significantly impair the health of the pension industry overall.

The average defined benefit pension plan has only 3.2% of its assets in GICs. The average defined contribution plan is more heavily invested in GICs at 35.7%. But defined contribution plans cover only half as many employees as defined benefit plans.

But the collapse of the high-

See **Junk** on page 45

Slicing up the $200 billion high-yield pie



Source: U.S. GAO & Drexel Burnham Lambert

Graphic by John Hall

Executives with camping supply-maker Coleman Co. came under fire for their decisions in selecting annuities for pension liabilities.

Annuity purchases under Capitol glare

By Joel Chernoff

WASHINGTON — Congress wants to close a gaping hole in participants' benefit security by drafting tougher rules for purchasing annuities.

In the wake of First Executive Corp.'s $515 million write-off in its junk-bond portfolio, Congress is scrutinizing standards used in purchasing annuities, insurers' soundness in underwriting those contracts, and whether those benefits are safeguarded adequately.

Ultimately, this examination

See **Annuities** on page 46

Labor Department retargets LBO terms

By Joel Chernoff

Less than five years after halting Scott & Fetzer Co.'s proposed leveraged buy-out, the Department of Labor once again is stalking LBOs it says fail to give employee stock ownership plans a fair shake.

In a lawsuit that one Labor Department official described as representing a potential "landmark case," the government has sued Valley National Bank of Arizona and eight officers of Scottsdale-based Kroy Inc. for allegedly overcharging Kroy's ESOP for shares it purchased as part of the company's December 1986 leveraged buy-out.

The government alleged the ESOP was forced to pay $5.92 per share for its 6 million shares — more than five times the $1.125 per share paid by other investors. The Labor Department took its strongest shots at Valley National, the ESOP's trustee, for allegedly failing to conduct a good faith, independent investigation in allowing the ESOP to overpay for the stock.

ESOP advocates argue the Labor Department's position effectively will kill leveraged buy-outs that use ESOPs. "You're going to kill the goose that lays the golden eggs," said Rick Braun, managing director at Houlihan, Lokey Howard & Zukin Inc., a Los Angeles valuation firm.

The Labor Department's lawsuit is similar to its intervention in Westlake, Ohio-based Scott & Fetzer's aborted August 1985 buy-out. There, the government stepped in while the transaction was under way and argued the proposed Scott & Fetzer ESOP was getting only 41% of the company's shares while putting up the majority of the equity financing.

The department's involvement effectively scotched the deal. Scott & Fetzer instead was sold to Berkshire Hathaway Inc., Omaha, Neb., and few other similar deals have been transacted since.

But ESOP proponents — notably Kelso & Co., New York, which was the investment banker on the Scott & Fetzer deal — later raised a ruckus about the Labor Department's action, lobbying then-Labor Secretary William Brock on the issue and virtually calling for the heads of certain department officials.

The Labor Department adopted a conciliatory note, promising to provide guidance to the ESOP community about leveraged buy-out deals involving multiple investors.

It appears the department's long-delayed guidance finally has arrived — although it is far from the stance sought by ESOP supporters.

Rather, the government has resurrected the theory it embraced in the Scott & Fetzer transaction.

The department is saying an ESOP must be given a share of the company's stock proportionate to the amount of equity financing it provides.

"An ESOP's investment, on a dollar-for-dollar basis, should have the same purchasing power as any other cash investor," David George Ball, assistant secretary of labor, said in a recent speech.

"Workers, through the ESOP, are entitled to get a dollar's worth of stock for each dollar the ESOP has invested with the proceeds of the ESOP loan, just as management and investment bankers are entitled to get a dollar's worth of

See **Kroy ESOP** on page 46

NEWS DIGEST

Concern about oil spills and other environmental threats has evolved into a set of principles that is gaining support from state and local governments. Page 43.

Small employers are crying foul over an IRS targeted audit program challenging actuarial assumptions. Page 4

SPECIAL REPORT: PIPER

The year-end PIPER survey chronicles the performance of insurance company and bank funds, as well as independent managers. Page 16.

FINANCING

The fall of Drexel Burnham Lambert Inc. and the junk bond market is putting the state of insurance industry investments under a magnifying glass. Page 1

West German merger and acquisition activity is starting to heat up. Page 39

INTERNATIONAL

Financial authorities are stepping up their liberalization efforts of the West German capital markets. Page 38.

REAL ESTATE

Equitable Real Estate has signed up five public funds for a new closed-end vehicle. Page 4

Office vacancy levels will remain high and continue to hold down performance. Page 37.

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Managers survey under way

Pensions & Investments has sent out questionnaires for its annual directory of investment advisers. If your firm has not received a questionnaire and would like to participate, or if you have any questions regarding the form, please contact Christine Philip, directory coordinator, *Pensions & Investments*, 740 N. Rush St., Chicago, Ill. 60611-2590; (312) 649-5217.

Holtzman to turn up heat

NYC comptroller defines agenda

By Hillary Durgin

NEW YORK — Corporate America watch out.

New York City's new comptroller, Elizabeth Holtzman, intends to expand the role of public funds as corporate watchdogs by challenging all areas of company performance, from environmental to worker safety issues.

The city's chief fiscal officer, who oversees the $41.4 billion city retirement system, is redefining the vanguard tradition of the activist pension fund. The ex-congresswoman and prosecuting district attorney from Brooklyn promises to keep the pressure on corporate America by carrying on the legacy of her predecessor, Harrison J. Goldin. Mr. Goldin was one of the first public pension fund executives to hold companies accountable to shareholders.

"We're in a much more competitive environment," Ms. Holtzman said. "And if this country becomes a second-rate economy, the pension funds are going to be big losers."

In a recent interview with *Pensions & Investments*, Ms. Holtzman laid out for the first time her vision of how the fund will pursue its course of pension fund activism with respect to social investing and corporate governance.

Under Mr. Goldin, the fund sponsored and co-sponsored shareholder resolutions on procedural issues, including poison pills and secret ballots; it also has been a strong proponent of the Statement of Principles and the MacBride Principles, which guide corporate conduct in South Africa and Northern Ireland, respectively.

At the time of the Exxon Valdez oil spill in Alaska, Mr. Goldin became one of the first pension fund officials to begin discussions with corporate management when he threatened to cast the system's 6 million votes at Exxon's then-upcoming annual meeting against the board of directors if the board didn't take responsibility for the spill and hasten the cleanup.

Photo by Alice Garik

Elizabeth Holtzman is broadening her fund's activism.

Ms. Holtzman plans to take activism a step further and focus on all aspects of corporate performance.

"What I'm concerned to see is the corporations we invest in pro-

See **Holtzman** *on page 43*

AP Wide World photo

Despite the release of Nelson Mandela from a South African prison, institutional investors say they will not loosen their economic pressure on the country until its apartheid policies are abolished.

S. Africa still captive to pressure

By Trudy Ring

While Nelson Mandela has gained his freedom, the government of South Africa is still shackled by worldwide financial and economic pressures.

Institutional investors in the United States and elsewhere plan to maintain investment restrictions and other means of economic pressure on South Africa, despite recent developments in that country.

No domestic pension fund contacted for this article plans to change its policy on South Africa in the near future, despite the legalization of the African National Congress and release of Mr. Mandela, its leader. In the United Kingdom, the number of pension funds with restrictions on South Africa-related investments actually is expected to grow, according to a study by Pensions & Investment Research Consultants Ltd., London (*see related story on page 42*).

"Our policy is significantly aimed at the abolishment of

See **S. Africa** *on page 42*

Activists get nod from Ball

By Marcia Parker

Activist institutional investors now have the blessings of Assistant Secretary of Labor David George Ball.

Until now, the views of Mr. Ball, the federal government's top retirement and employee benefit official, on the growing involvement of institutional shareholders in proxy voting and corporate governance were not well known. Since he was named to the post less than a year ago by Secretary of Labor Elizabeth Dole, the former Amax Co. executive has maintained a low profile.

Indeed, members of the institutional investing community have wondered whether the Labor Department would continue to expand on what has been in recent years a stepped-up watchdog and enforcement program.

Mr. Ball's support for institutional investors came in a Jan. 23 speech to the Financial Executives Institute on the Labor Department's proxy voting guidelines. It was reinforced in a letter from another department official to a group that raised concerns about proxy voting policies of some investment managers.

In a strong endorsement, Mr. Ball took up the flag for the cause of institutional investors campaigning for a greater role in the corporations they own.

"I believe that as institutional shareholders own an ever greater portion of corporate America, it is

See **Proxy** *on page 47*

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5 public plans invest in specific-site fund

By Terry Williams

NEW YORK — Five public pension plans have invested $496.6 million in an Equitable Real Estate Investment Management Inc. closed-end commingled fund of seven specified properties.

Pensions & Investments learned investors include the $44.2 billion New York State & Local Retirement Systems, the $28.1 billion New York State Teachers' Retirement System and the $4.3 billion Illinois Municipal Retirement Fund.

The $3.9 billion Utah State Retirement Fund and the $20 billion State of Wisconsin Investment Board reportedly also are subscribers, but this could not be confirmed with fund officials.

Called the Select Properties Fund, the vehicle includes two regional malls, four office buildings and a research and development complex, according to Jonathan Miller, a spokesman with Equitable Real Estate. The fund has a 15-year holding period and no other properties are to be added.

Mr. Miller described the malls as having about 1 million square feet each and being "fully tenanted" with strong anchors. The office buildings also are well leased, with occupancy more than 97%. He declined to identify or locate the properties, saying only they are diversified geographically.

The properties do not have high profiles outside of the respective cities, according to Mr. Miller.

"It's not the Sears Tower," said Bob Hinckley, a spokesman with the New York State & Local system, Albany, which invested $147.7 million in the closed-end fund. "Unless you lived there, you wouldn't know of these properties."

Mr. Miller and representatives from the other subscribers would not say how much they invested in Select Properties. A real estate professional familiar with the deal, however, said subscriptions ranged from $100 million to $150 million.

Property-specific funds have been gaining in popularity among institutional investors — at the expense of blind pools — because of recent low real estate returns and greater information about the assets in the portfolio.

"The basic concept is investors would rather invest in a situation where they can know how it's going to affect their portfolio," said Jake Young, a consultant with Roulac Real Estate Consulting Group, Chicago.

Paul Saint-Pierre, president of Pension Realty Advisors, San Francisco, said he thinks property-specific funds will continue to become more popular than blind pools.

"As investors in real estate approach the industry with more caution, they're going to want more information about the asset. It's a risk management technique." ■

CORRECTIONS & CLARIFICATIONS

- Incorrect data for the New York City Teachers' Variable Funds A and B were included as part of the **New York City Retirement Systems** profile Jan. 22. As of Sept. 30, the city systems' employee benefit assets totaled $41.404 billion, an increase of 16.5% from the $35.537 billion reported a year earlier. At $41.404 billion, the city drops to No. 5 from No. 3 among the Top 200 funds.
- The assets of **Atlantic Portfolio Analytics & Management Inc.** were misclassified in the Feb. 5 Scorecard survey. The firm, with a net gain of $417 million in mortgage-backed securities, would have ranked second on the fixed-income growth chart for managers with $250 million to $1 billion under management.

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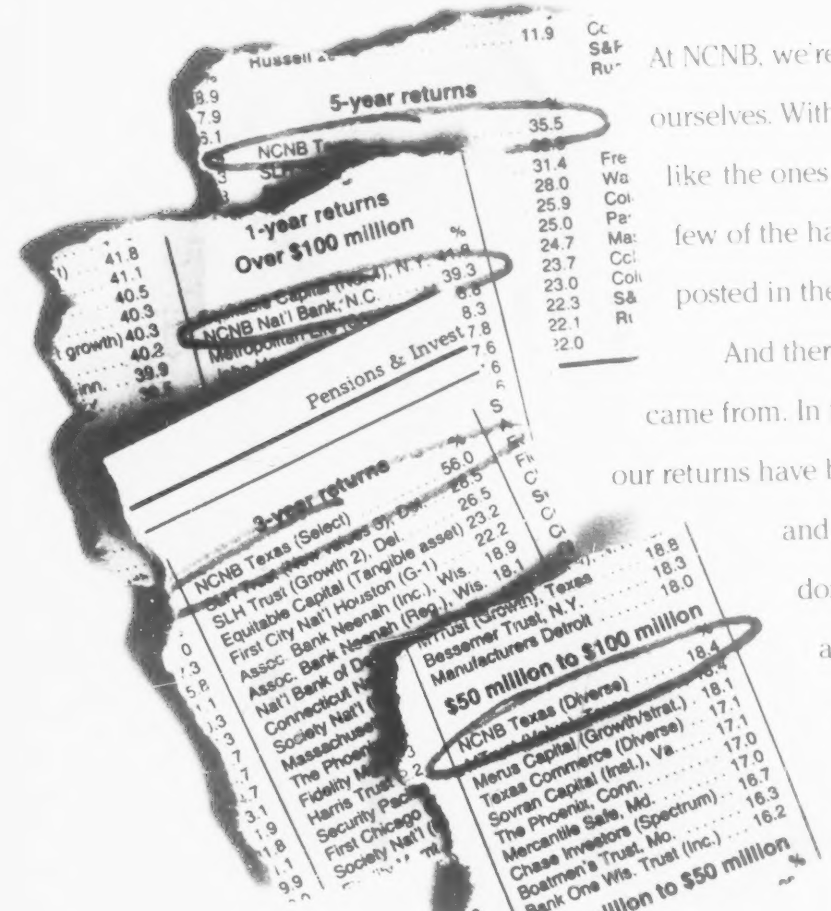

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A bit shy of the bull's-eye

Funds fall short of bogeys for fourth quarter

By Trudy Ring

Median equity and fixed-income funds in the PIPER + universe lagged their benchmarks in the fourth quarter, while a majority of balanced and tactical asset allocation funds underperformed both stock and bond yardsticks.

The median equity fund returned -0.27% in the quarter, while the Standard & Poor's 500 Stock Index was up 2.1%. The median fixed-income fund returned 3.2%, while the Shearson Lehman Hutton Government/Corporate Bond Index had 3.6%. The median balanced and/or tactical asset allocation fund returned 1.8%.

The PIPER + universe comprises 379 equity, 233 fixed-income and 151 balanced/TAA funds managed by investment counseling firms. The universe is still evolving, thus some managers missed the deadline for filing their returns. It also has a slight upward bias, with managers who have good returns being more inclined to report them early. The universe is compiled for *Pensions & Investments* by Rogers, Casey & Associates, Darien, Conn. Managers are allowed to submit a representative fund or composite of accounts.

For 1989, the median equity fund returned 27.4%, while the S&P 500 was up 31.6%. For the three years ended Dec. 31, the equity median was 16.2%, on a compound annual basis, and the index return 17.3%; for the five-year period, the median was 19.8% and the index, 20.3%. For the 10 years, the median fund outperformed the S&P 500, 19.1% to 17.6%.

Among fixed-income funds, the median return for 1989 was 12.3%, compared with 14.2% for the Shearson Lehman Hutton index. For the three years, the median fund beat the index slightly, 8.1% to 7.9%. This also was the case for the five-year period, with 12.2% for the median and 12% for the index, and the 10-year period, with 12.8% for the median and 12.2% for the index.

The balanced/TAA median lagged stocks but beat bonds in 1989, with a 20.4% return. The median return for these funds for the three-year period was 12.9%, for the five-year period, 16.8%, and for the 10-year period, 15.8%.

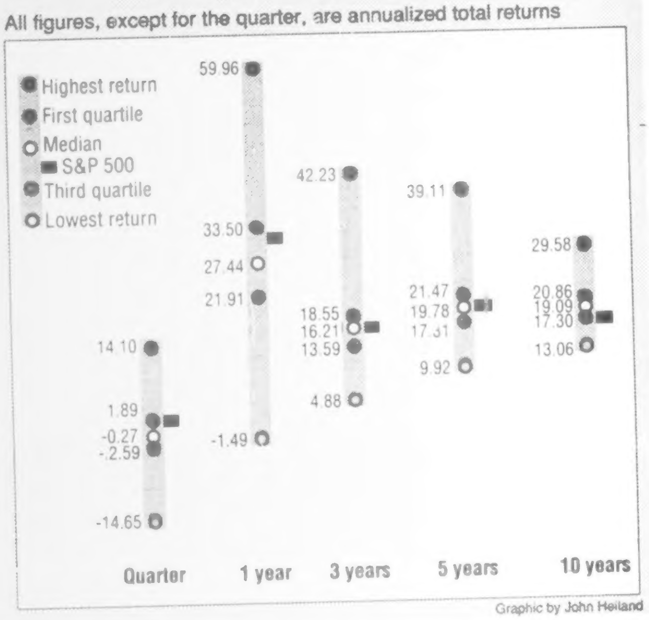
Frontier Capital Management Co., Boston, had the quarter's top equity performance with its energy/equity plus cash account, which returned 14.1%. It was second for the year with 59.4% and seventh for the three-year period with a compound annual 26.4%. Frontier officials did not return calls for comment on their investment strategy.

Cheswick Investment Inc., Greenwich, Conn., had the best return — 60% — for the one-year period. "Our results reflect a concentrated portfolio of high-quality growth stocks," said Richard Cheswick, chief executive officer.

Holdings include **Alva Corp.**, **Merck & Co. Inc.**, **Philip Morris Cos. Inc.**, **Eli Lilly & Co.** and **Coca-Cola Co.** During the year, Cheswick also was helped by its holdings in warrants on Alva, Lilly and the Federal National

See **Fall short** *on page 16*

PIPER+ equity funds
(period ended Dec. 31)
All figures, except for the quarter, are annualized total returns



Graphic by John Heiland

Growth niches make the difference for stock firms

PIPER special equity funds
(periods ended Dec. 31)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	6.57%	47.71%	33.91%	34.17%	20.78%
First quartile	0.01	32.25	18.27	19.62	18.13
Median	-2.57	23.92	14.42	16.48	16.17
Third quartile	-4.05	18.79	11.46	13.53	13.14
Lowest return	-10.35	4.36	5.76	6.57	10.97
S&P 500	**2.06**	**31.55**	**17.30**	**20.34**	**17.57**
Russell 2000	**4.95**	**16.24**	**9.82**	**12.90**	**14.52**

PIPER + special equity funds
(periods ended Dec. 31)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	4.30%	64.52%	27.88%	26.67%	27.03%
First quartile	1.38	36.39	18.04	20.59	23.18
Median	-1.68	25.25	15.79	18.93	20.69
Third quartile	-4.65	20.62	12.24	16.28	16.76
Lowest return	-9.50	10.19	7.09	10.34	13.48
S&P 500	**2.06**	**31.55**	**17.30**	**20.34**	**17.57**
Russell 2000	**4.95**	**16.24**	**9.82**	**12.90**	**14.52**

By Hillary Durgin

The top performing special equity managers for 1989 selected stocks with strong earnings growth potential from industry sectors including healthcare, energy and technology.

Managers participating in the Pensions & Investments' Performance Evaluation Report and PIPER + unearthed market niches winning them high returns. Dynamic earnings growth apparently was the key to top performance for both the short and long term.

The top finisher in the PIPER + universe of special equity funds run by investment counseling firms was the small-cap portfolio of Fred Alger Management Inc., New York, which returned 64.52% for the year. The $14 million portfolio is a mutual fund.

The median fund in the 74-fund PIPER + special equity universe returned 25.25% for the year, compared with the Standard & Poor's 500 Stock Index's 31.55% and the Russell 2000 Index's 16.24%.

The PIPER + universe, which covers funds managed by investment counseling firms, is still evolving, thus some managers missed the deadline for filing their returns. It also has a slight upward bias, with managers who have good returns being more inclined to report them early. Managers are allowed to submit a representative fund or composite of accounts.

Equitable Capital Management Corp., New York, which posted a return of 47.71% on its $31 million special growth common stock fund, was the top finisher among the bank and insurance company commingled funds in the PIPER universe.

The median special equity fund in the 98-fund PIPER universe returned 23.92%.

Both PIPER and PIPER + are compiled for *Pensions & Investments* by Rogers, Casey & Associates, Darien, Conn.

The Fred Alger fund invests in companies that have a 30% annual growth rate and range from $40 million to $1 billion in market capitalization, or an average of $300 million, said David Alger, executive vice president and portfolio manager for the fund.

"The strategy is essentially buying companies that are growing very rapidly," Mr. Alger said.

In an effort to identify investment opportunities, the firm's 20-person research staff follows 1,500 companies under $1 billion, and from those selects candidates that have distinguished themselves in market niches through new product offerings, better management or growing market share.

In the past year, Fred Alger's small-cap fund has benefited from investments in special technology, including **Conner Peripherals Inc.**, which makes small disk drives for laptop computers; medical technology, including **Mylan Labs Inc.**, which is manufacturing a new drug product; niche restaurant companies, including **Max & Erma's Restaurants Inc.**, an upscale ham-

See **Growth** *on page 23*

Top two deciles PIPER + equity funds

3-month returns

	%
Frontier Capital (Energy)	14.1
W.H. Reaves (Utility Energy)	9.0
Trust Co. West (Strategy)	6.8
Scudder Stevens Clark (Growth)	5.6
NFJ Invst. Group (Select)	5.6
Cutler & Co.	5.1
Berg Capital	4.8
Scudder Stevens Clark (VL)	4.8
Givens Hall Capital	4.6
Securities Res. (Putnam Voyager)	4.5
BRS Capital (Select)	4.5
Birmingham Capital (Total)	4.5
Atlanta Capital (Quality)	4.4
Scudder Stevens Clark (Growth)	4.3
Frontier Capital (Trad. growth)	4.1
Chase Invst. Counsel	4.1
Pacific Invst. (S.A. free)	4.1
Mitchell Hutchins (Select)	4.1
Securities Res. (AIM Weingarten)	3.9
Lee, Robinson & Steine	3.7
Webster Capital (Max. return)	3.6
J & W Seligman (Growth inc.)	3.3
Securities Res. (Charter Nat'l)	3.1
BRS Capital (Active WASF)	3.0
Securities Res. (Dreyfus 3rd Cent.)	2.9
Westridge (Enhanced index)	2.7
Aetna Capital	2.7
Investors Research (Select)	2.7
Marinvest (Comb. opportunity)	2.6
Sunbank Capital	2.5
Caldwell & Orkin	2.4
John McStay	2.4
Securities Res. (Dreyfus growth)	2.4
Pacific Invst. (Plus)	2.3
Newell Associates (Rel. yield)	2.3
TSA Securities (Active core)	2.3
Securities Counselors of Iowa	2.3
Jundt Capen Assoc. (Large cap.)	2.2
Wilke Capital (Core growth)	2.2
S&P 500	**2.1**

1-year returns

	%
Cheswick Invst.	60.0
Frontier Capital (Energy)	59.4
Provident Invst. Counsel (Stellar)	50.1
Beacon Invst.	49.8
Provident Invst. Counsel	46.7
Mt. Auburn Mgmt.	45.9
Investors Research (Growth)	44.5
Lehman Ark Mgmt. (Spec. sit.)	43.6
Trust Co. West (Strategy)	42.1
Trust Co. West (Special)	41.6
Investors Research (Select)	40.9
Scudder Stevens Clark (Growth)	40.6
Frontier Capital (Trad. growth)	39.9
Tukman Capital (Active)	39.9
Fred Alger Mgmt.	39.5
W.H. Reaves (Utility energy)	39.4
Mass. Financial (Low vol.)	39.2
Atlanta Capital (Growth)	38.9
Value Line (Standard)	38.4
Delta Financial (Agg. growth)	38.4
Chase Invst. Counsel	37.8
Jundt Capen (Large cap.)	37.6
J & W Seligman (Growth)	37.4
John McStay	37.3
Aetna Capital	36.8
General American (Closed end)	36.8
IDS Advisory (Lg. cap. growth)	36.8
Atlanta Capital (Quality)	36.1
Cadence Capital (Small cap.)	36.1
Crescent (Enhanced index)	36.0
Campbell Advisors (Growth)	35.9
Securities Res. (Putnam Voyager)	35.9
Chase Investors (Sm. cap. value)	35.9
Sunbank Capital	35.8
Hellman, Jordan	35.4
Wilshire Asset (Lg. co. growth)	35.3
Cutler & Co.	35.2
IDS Advisory	35.2
Givens Hall Capital	35.2
S&P 500	**31.6**

3-year returns

	%
NFJ Invst. Group (Select)	42.2
Wilshire Asset (Lg. co. growth)	38.3
C.H. Brown (Computer)	32.0
Crescent (Enhanced index)	29.9
John McStay (Small cap.)	27.9
Provident Invst. Counsel (Stellar)	26.6
Frontier Capital (Energy)	26.4
Mt. Auburn Mgmt.	25.5
Cadence Capital (Small cap.)	25.4
Junka & Voyles	24.7
Argus Investors' Counsel	24.6
Brinson Partners	23.5
Steven J. Margaretic	22.3
Tukman Capital (Active)	22.2
Cheswick Invst.	22.0
IDS Advisory (Lg. cap. gro.)	21.8
GAMCO Investors	21.3
Investment Counselors	21.1
Junka & Voyles	21.0
Eagle Asset Mgmt.	20.9
Hellman, Jordan	20.9
Chase Investors (Sm. cap. value)	20.9
Securities Res. (Kemper Summit)	20.4
Pennsylvania Invst. (Dyn. value)	20.4
Beacon Invst.	20.1
Securities Res. (Dreyfus growth)	19.9
Investors Research (Growth)	19.7
Westridge (Enhanced index)	19.6
Systematic Financial (Hi. cash)	19.5
John McStay	19.4
Cadence Capital (Lg. cap.)	19.2
Sirach Flinn, Elvins Capital	19.2
Rosenberg Institutional (Core)	19.1
Cramer Rosenthal McGlynn	19.1
Hellman, Jordan (Rep. combus.)	19.1
S&P 500	**17.3**

5-year returns

	%
NFJ Invst. (Select)	39.1

Continued on page 18

Growth equities still lead the way

By Leonard J. Hollie

Analysts are predicting value stocks will make a comeback in the 1990s, but for the last quarter of the 1980s, growth stocks continued to lead among PIPER equity funds.

In fixed income, longer maturities boosted the leaders in the quarter, while high-yield bonds proved beneficial in the mid- and long-term.

In a volatile market for both stocks and bonds, the Standard & Poor's 500 Stock Index returned 2.06% for the quarter and 31.55% for the year. The median PIPER equity fund returned 1.14% for the quarter and 27.48% for the year.

In the fixed-income market, the Shearson Lehman Hutton Government/Corporate Bond Index returned 3.61% for the quarter and 14.22% for the year. The PIPER median fixed-income fund returned 3.33% for the quarter and 13.01% for the year.

PIPER returns reflect the performance of bank and insurance company commingled funds and were compiled by Rogers, Casey & Associates, Darien, Conn.

Shearson Lehman Hutton Trust Co.'s Flex Growth 7 fund again led all 337 pooled equity funds, returning 51.11% for the year ended Dec. 31. The fund also had led the year in two previous quarters.

Equitable Capital Management Corp.'s Fund No. 4 was second, returning 45.4%. Chancellor Capital Management's Select Growth Fund was third, returning 44.67%.

"In 1988, cyclical stocks did well, but in 1989 it was just the opposite," said Larry Tashjian, executive vice president for Provident Investment Counsel, which is the adviser to the $5 million Shearson fund.

"Our portfolio does well in periods when there is consistency and predictability in market interest rates," said Mr. Tashjian, who added individual stock returns were helped by about 34% of the market's overall returns coming from leveraged buy-outs and company restructurings.

He said the Shearson fund found success in picking stocks of quality companies with strong earnings-per-share growth. Some of the stocks in the portfolio include **Toys "R" Us Inc.**, **Wal-Mart Stores Inc.**, **Waste Management Inc.** and the **Student Loan Marketing Association**.

Al Stewart, manager of Equitable's $1.25 billion Fund No. 4, said he was looking to buy stocks for the growth-oriented account that will grow far more than the overall economy. Some of the stocks in the portfolio include **Loews Corp.**, **McCaw Cellular Communications Inc.** and **GTE Corp.**

For the fourth quarter, Bank One Wisconsin Trust, Milwaukee, bested the field with its Growth Equity Fund, returning 5.43%. NCNB Texas' Growth Equity fund was second, returning 5.17%, and Liberty National Bank and Trust, Okla., placed third with its equity fund returning 5.11%.

The $25 million Bank One Growth Equity Fund is weighted in large-capital growth stocks with recognizable names that will attract foreign investors, said Scott D. Andrews, Bank One vice president in charge of investments and senior portfolio manager. Some of the stocks in the portfolio include **RJR Nabisco Inc.**, **Reebok International Ltd.**, **PepsiCo Inc.**, **Walt Disney Co.**, **General Electric Co.** and **L.A. Gear Inc.**

"What accounts for the fund's performance is the quality of the stocks held in the portfolio," said Mr. Andrews. "The fund is not actively traded. I don't buy and sell. I like to find names I can live with over a long period of time through good and bad markets."

For three-year performance, Denver-based United Capital Management's $38 million Equity Fund was first, returning 25.63% against an S&P 500 of 17.3%. PIPER returns for periods of more than one year are compound annualized.

Lon Schreur, president of United Capital, said the fund's strategy is to pick strong industrial and manufacturing stocks that would benefit from a decline in the dollar and a pickup in exports. Some of the stocks in the portfolio include **Clark Equipment Co.**, **Caterpillar Inc.**, **Ingersoll-Rand Co.**, **Bethlehem Steel Corp.** and **Inland Steel Industries Inc.**

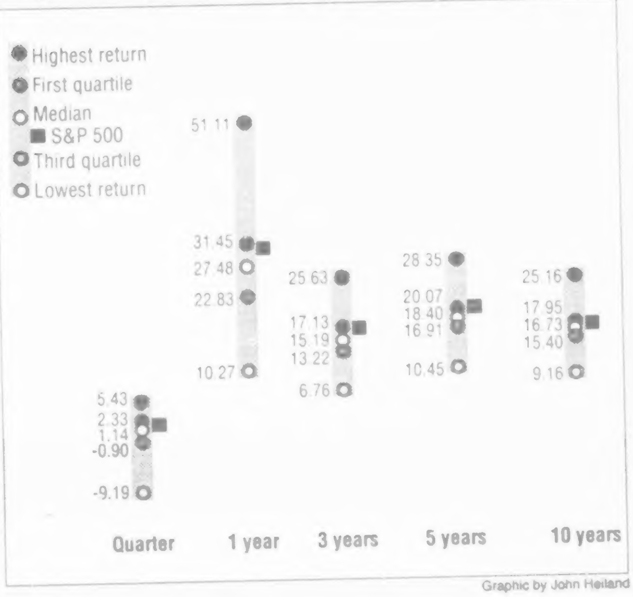
Sun Bank Capital Management, Orlando, Fla., led both the five- and 10-year returns with its $685 million equity fund. The fund returned 28.35% for the five years and 25.16% for the 10 years, vs. 20.34% and 17.57% respectively for the S&P 500.

See **PIPER** *on page 34*

PIPER equity funds

(periods ended Dec. 31)

All figures, except for the quarter, are annualized total returns



Graphic by John Heiland

Diversification helping realty

By Steve Hemmerick

Pension officers frequently are getting as good or better investment performance from their large, diversified, open-end commingled real estate funds run by insurance companies as from many of the higher risk specialized funds.

One of the insurance company funds, the $340 million Tower Fund of Metropolitan Life Insurance Co., New York, had a 14.52% return for the year ended Sept. 30, scoring in the top 10% of open-end commingled funds, according to Pensions & Investments' Performance Evaluation Report, which is compiled by Rogers, Casey & Associates Inc., Darien, Conn.

The Tower Fund, which invests in high-quality, highly diversified properties in secondary cities, such as Yuba City, Calif., had the third best performance among 39 open-end commingled funds for the one-year period.

For the same period, another insurance company fund, Equitable Real Estate Investment Management Inc.'s $3.6 billion Prime Property Fund was in the top 30% of open-end funds with a 10.59% return.

The Equitable fund is the largest in net assets of all open- and closed-end funds, and the larger funds are thought to be more difficult to manage.

Because the larger insurance company funds are well diversified, they are expected to provide stable and good performance, but not the highest performance in comparison with smaller funds that invest in narrow bands of real estate and are more risky.

Two other insurance company

See **Realty** *on page 34*

'80s end on high note for international

Managers finish year above benchmark

By Curtis Vosti

The last year of the 1980s was a heady time for the international managers in Pensions & Investments' Performance Evaluation Report.

The median PIPER international return, 17.54%, was higher than the international benchmark, the Morgan Stanley Capital International Europe Australia Far East Index, which returned 10.79%.

That distinguished performance also was true for the fourth quarter. CIGNA Corp.'s international equity account was the top performer, returning 13.2%. The median return of the 48 funds reporting was 4.8% for the quarter. EAFE returned 4.59%.

The $220 million CIGNA fund uses a top-down, geographic approach that tries to maximize risk-adjusted returns, according to Laurie LeBlanc, assistant vice president for product management, Hartford, Conn.

She said the fund enjoys one of the lowest volatilities in the international arena, hence it tries to focus on liquid, low-risk stocks among the 1,000 companies from the EAFE universe.

"We'd be more likely to get out of the market early and miss some of the upside, than to stay in too long," Ms. LeBlanc said.

Once the firm determines geographic slant, it uses a macroeconomic forecast to help determine sector allocation. The norm is to choose a blue-chip stock from within the chosen sectors.

The fund typically does not use currency hedging, Ms. LeBlanc said, preferring to make its currency bets through the geographic allocation. The fund has been completely out of Japan for the past 18 months, and can go into cash when bearish, as its current 22% position attests.

The strategy has worked well through the fund's five-year history: it finished the year with a second-best 29.27%; for the three-year period it was in the top decile, with 21.08% return, and for the five-year period it returned 34.25%. All PIPER returns for periods of more than one year are annualized.

But while CIGNA's fund has been a steady performer, it has been a roller-coaster ride for the top performer for the year, Wellington Trust Co.'s emerging stock portfolio.

The fund returned 29.97% for the year despite a poor 2.51% for the fourth quarter. That return placed it at the bottom of PIPER's ninth decile.

The up-and-down performance is due to the characteristics of the stocks in the portfolio — each having less than $250 million in annual sales, according to Marie-Claude Bernal, vice president and portfolio manager, Boston. "Small stocks are more volatile," she said. But she said the volatility is to be expected and will not harm the long-term performance of the fund.

The smallness of the companies, however, can hurt the fund during recoveries from market plunges, such as Oct. 13, 1989, and Oct. 19, 1987, she said.

"October (1989) was a big setback," she said. "But, generally, small companies tend to lag on the recovery side."

Although the setbacks can be brutal, Ms. Bernal said "in time" the fund's investment strategy will prove itself, even when pitted against other emerging markets' funds.

Using sales as a defining characteristic is purer than other emerging funds that use valuation levels that can bias the portfolio, she said.

For the year, Wellington's fund did so well in part because of takeovers of 7% of its holdings. While Ms. Bernal doesn't make bets on takeover prospects, she said the fund does consider the capital structure or family history behind the companies in its portfolio, characteristics that can be favorable for a takeover.

For the three-year period, Bankers Trust Co.'s international equity account was the top performer at 23.99%. The median return for the three-year period was 16.13%, and the EAFE return was 21.19%.

Bankers Trust is a consistent performer, finishing No. 5 for the quarter, No. 6 for the year and No. 5 for the five-year period.

The almost $300 million actively managed account uses a top-down, broadly diversified strategy, holding about 100 securities in the portfolio. The fund tries to identify global themes that will lead to sector selection, according to Alex Mour, vice president of international marketing and sales.

For the five-year period ended Dec. 31, the top performing PIPER international fund was Chase Investors' Chase Manhattan Bank's EAFE Index, which returned an annualized 36.75%, topping the EAFE's 36.52%. The median PIPER international fund returned an annualized 31.19% for the five-year period.

For the 10-year period, United States Trust Co. of New York returned an annualized 22.19%, while the EAFE return was 22.77%.

PIPER is compiled by Rogers, Casey & Associates, Darien, Conn. ■

Top two deciles PIPER commingled equity funds

3-month returns

	%
Bank One Wisconsin (Growth)	5.4
NCNB Texas (Growth)	5.2
Liberty Nat'l, Okla	5.1
First Wisconsin (Income)	5.1
Mercantile Bank Joplin (A), Mo	5.0
First Asset (II), Minn	4.6
Lake Shore Nat'l, Ill	4.6
Crestar Bank (Roanoke), Va	4.6
First City Nat'l, Texas	4.6
First Kentucky Trust	4.6
Signet Trust (Value), Va	4.6
Citizens Comm'l (Div. gro.), Mich	4.4
Northern Trust (Select), Ill	4.3
Summit Trust, N.J	4.2
Equitable Capital (No. 4), N.Y	4.2
Wheeling Dollar Bank, W. Va	4.1
The Phoenix, Conn	4.1
First Nat'l of Omaha (D), Neb	4.1
Princeton Bank, N.J	4.0
Columbus Bank, Ga	4.0
First Bank Milwaukee	3.9
Summit Bank, Ind	3.9
First Nat'l Kenosha (CT4001), Wis	3.8
Chancellor (Select growth)	3.8
Mercantile Bank Joplin (C), Mo	3.8
Bessemer Trust, N.Y	3.6
Beverly Trust, Ill	3.6
Great West Life (VAAA), Manitoba	3.5
Planters Nat'l (Growth), N.C	3.5
Bank of Tokyo, N.Y	3.5
Bank One Wisconsin (Income)	3.5
First Interstate of Oklahoma	3.5
Mercantile Bank, Mo	3.5
Southtrust Bank, Ala	3.4
Johnson County Bank, Kan	3.3
Bank of New York	3.3

Continued on page 26

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Continued from page 16

Wilshire Asset (Lg co growth)	32.4
C H Brown (Computer)	31.5
Crescent (Enhanced index)	31.3
Cadence Capital (Small cap)	30.6
Beacon Invst	27.7
Jurika & Voyles	26.9
Cheswick Invst	26.0
Pennsylvania Invst (Dyn value)	25.5
Cadence Capital (Lg cap)	25.3
Argus Investors Counsel	25.1
Tukman Capital (Active)	24.8
Nicholas-Applegate (Growth)	24.6
Steven J Margaretic	24.5
Eagle Asset Mgmt	24.4
Severn Associates (I)	24.3
Geewax Terker (H Q growth)	23.9
GAMCO Investors	23.7
Mitchell Hutchins (Select)	23.4
IDS Advisory (Lg cap gro)	23.3
Becker Van Etten	23.1
Scudder Stevens Clark (Gr inc)	23.0
Caldwell & Orkin	22.9
W H Reaves (Utility energy)	22.7
Investors Research (Growth)	22.7
Securities Res (Dreyfus growth)	22.7
Lehman Ark Mgmt (Spec sit)	22.6
J P Morgan (Research)	22.5
Delta Financial (Agg growth)	22.3
Trust Co West (Strategy)	22.3
Scudder Stevens Clark (Growth)	22.0
S&P 500	**20.3**

10-year returns

	%
C H Brown (Computer)	29.6
Severn Associates (I)	27.2
GAMCO Investors	26.8
Securities Res (Dreyfus growth)	26.4
Cadence Capital (Lg cap)	25.4
Cedar Hill Associates (Value)	24.6
Delta Financial (Agg growth)	24.2
Hellman, Jordan	24.0
Eagle Asset Mgmt	23.3
Steven J Margaretic	23.0
Tukman Capital (Active)	22.9
Geewax Terker (Sect rotation)	22.4
BRS Capital (Select)	22.1
Becker Van Etten	22.0
Miller Anderson & Sherrerd	22.0
Geewax Terker (H Q growth)	22.0
Investors Research (Select)	21.7
Wilshire Asset (Lg co growth)	21.6
Investment Counselors	21.6
Harbor Capital Mgmt	21.6
S&P 500	**17.6**

Top two deciles PIPER + fixed-income funds

3-month returns

	%
McKee Invst	7.5
Chancellor Capital	5.1
Discount Corp. of New York	5.1
Peters, Gamm & West	5.0
STW Fixed Income (Long comp.)	5.0
MIMLIC Asset (F)	4.3
Smith Affiliated Capital	4.2
Sirach Flinn, Elvins	4.2
IDS Advisory	4.1
Denver Invst. (Long)	4.0
Security Capital	4.0
Dewey Square Investors (Active)	4.0
Wright Investor's Service	3.9
MacKay-Shields	3.9
Aetna Capital (Cap weighted)	3.8
Van Kampen Merritt (Enhanced)	3.8
Investment Counsel (Inter)	3.8
Provident Invst	3.8
Smith Affiliated (Municipal)	3.8
Sunbank Capital	3.7
Fred Alger Mgmt	3.7
Haven Capital	3.7
SLH G/C	**3.6**

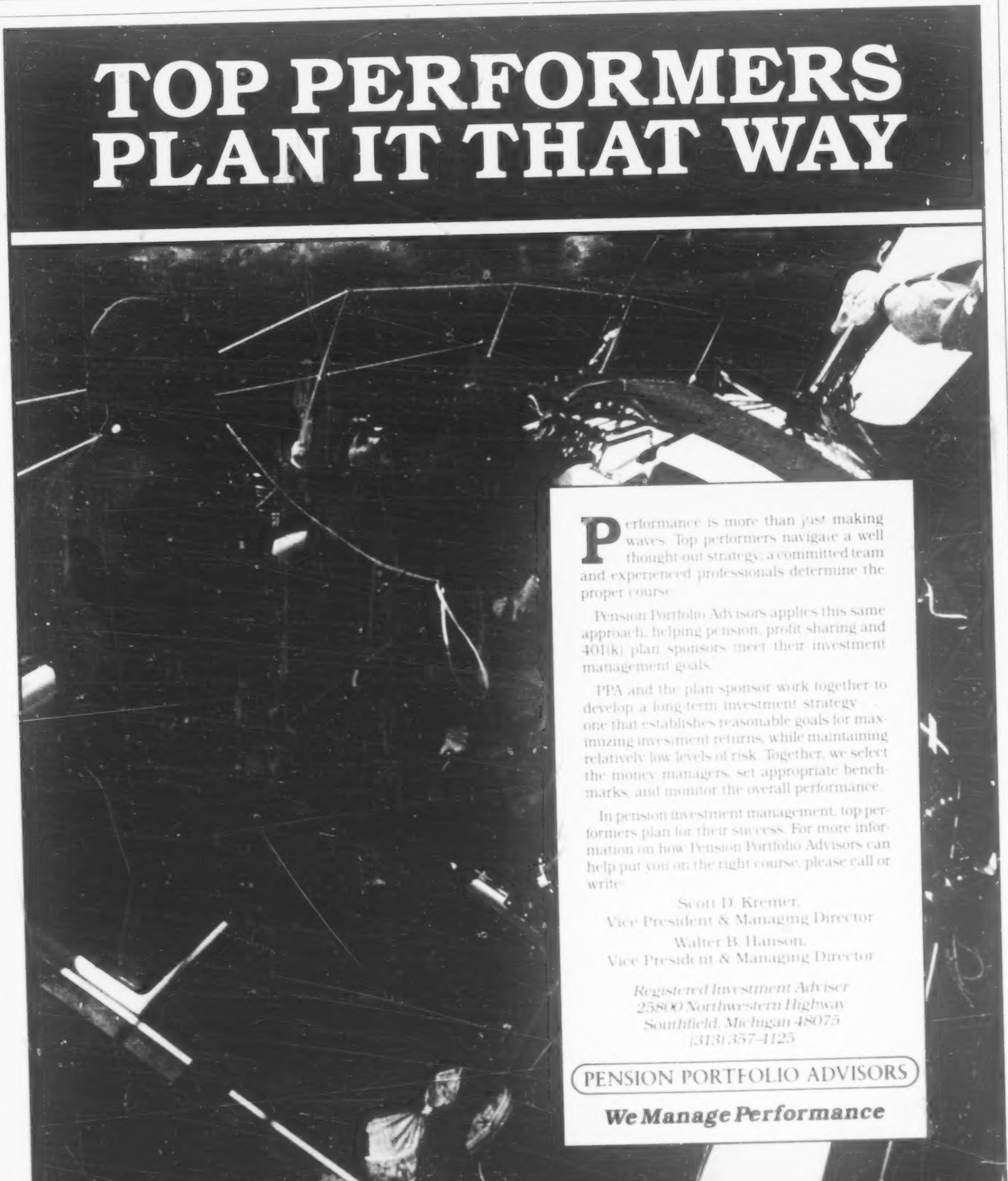
1-year returns

	%
McKee Invst	20.6
Calamos Asset (Convert)	19.4
Peters, Gamm & West	18.9
STW Fixed Income (Long)	18.5
Trust Co West (Convert GW)	17.6
Trust Co West (Convert)	16.9
Denver Invst. (Long term)	16.4
Smith Affiliated Capital	16.3
Chancellor Capital	15.9
J & W Seligman	15.5
MacKay-Shields (Convert value)	15.5
IDS Advisory	15.3
Wright Investor's Service	15.2
Van Kampen Merritt (Enhanced)	15.0
Investment Counsel (Inter)	14.9
Mellon Bond Assoc	14.9
Standish, Ayer & Wood (S A free)	14.9
Security Capital	14.8
Investment Counselors	14.8
Standish, Ayer & Wood (Active)	14.8
Sunbank Capital	14.7
MacKay-Shields (Convert growth)	14.7
SLH G/C	**14.2**

3-year returns

	%
Sullivan Money Mgmt (High yield)	12.0
McKee Invst	11.7
Trust Co West (Convert)	10.6
MacKay-Shields (Convert value)	10.4
Hoisington Invst	10.1
MIMLIC Asset (F)	10.1
Trust Co West (Convert GW)	9.5
Calamos Asset (Convert)	9.4
Loomis, Sayles (Disc)	9.4
STW Fixed Income (Long comp)	9.3
Marinvest	9.1
Western Asset (Long term)	9.1

Continued on page 20



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PENSION PORTFOLIO ADVISORS

We Manage Performance

Continued from page 18

PRIMA (PRIMA X)	9.0
Brinson Partners	9.0
PRIMA (PRIMA VII)	9.0
Smith Affiliated (Municipal)	8.9
Trust Co. West (High yield)	8.9
STW Fixed Income (Short comp.)	8.9
Cooke & Beiler	8.7
Security Capital	8.7
Longfellow Invst. (Short duration)	8.7
SLH G C	**7.9**

5-year returns

	%
McKee Invst	17.8
STW Fixed Income (Long comp.)	16.8
Trust Co. West (Convert.)	15.7
Trust Co. West (Convert. GW)	15.2
Denver Invst. (Long term)	15.2
Hoisington Invst	15.0
Smith Affiliated	14.8
Loomis, Sayles (Disc.)	14.5
PRIMA (PRIMA X)	14.4
Calamos Asset (Convert.)	14.2
Trust Co. West (High Yield)	14.2
Peters, Gamm & West	14.0
Wright Investor's Service	13.7
Western Asset (Long term)	13.7
Froley Revy (Convert. only A C)	13.6
IDS Advisory	13.5
Standish, Ayer & Wood (Active)	13.4
Miller, Anderson & Sherrerd	13.2
Mass. Financial (Active)	13.2
SLH G C	**12.0**

10-year returns

	%
STW Fixed Income (Long comp.)	16.6
PRIMA (PRIMA X)	16.3
Smith Affiliated	16.2
Trust Co. West (Convert.)	15.8
Wilmington Trust (Bench. 30 year)	15.4
Trust Co. West (Convert. GW)	15.2
Calamos Asset (Convert.)	15.2
PRIMA (PRIMA VII)	15.1
Wilmington Trust (Seven year)	15.0
Western Asset (Long term)	14.8
Hoisington Invst	14.7
PRIMA (PRIMA V)	14.5
Loomis, Sayles (Disc.)	14.5
SLH G C	**12.2**

Global investing April 30

Top two deciles PIPER + Balanced/TAA funds

3-month returns

	%
Starbuck, Tisdale & Assoc	5.3
Frontier Capital (Balanced)	4.5
Bankers Trust (TAA)	4.4
Criterion Invst. (Balanced)	4.1
Oxford Capital (Balanced)	3.9
BRS Capital (TAA model)	3.9
Bessemer Trust (Balanced)	3.7
Lee, Robinson & Steine (Balanced)	3.4
Chase Invst. (Risk averse bal.)	3.3
Chancellor (Stockshift 200)	3.1
Chancellor (Stockshift 100)	3.1
Chancellor (Stockshift 150)	3.1
Caldwell & Orkin (Total comp.)	2.9
Mass. Mutual (Balanced SIA-M)	2.9

1-year returns

	%
J & W Seligman (Balanced)	31.6
Beacon Invst. (Balanced)	31.2
Frontier Capital (Balanced)	31.1
Caldwell & Orkin (Total comp.)	30.9
Cheswick Invst. (Balanced)	30.3
Oxford Capital (Balanced)	28.7
Starbuck, Tisdale & Assoc	27.8
Value Line (Balanced)	27.6
Fred Alger Mgmt. (Balanced)	26.8
IDS Advisory (Balanced)	26.8
Investment Counselors (Bal.)	25.9
Sirach Flinn, Elvins (Balanced)	25.9
Pinnacle Assoc. (Balanced)	25.9
Baring America (Balanced)	25.9

3-year returns

	%
Oxford Capital (Balanced)	24.8
Chancellor (Stockshift 200)	23.7
Investment Counselors (Bal.)	20.1
TSA Capital (Strat. TAA)	20.0
Chancellor (Stockshift 150)	19.6
Bankers Trust (TAA)	19.0
Jurika & Voyles (Reg. bal. equity)	16.9
Value Line (Balanced)	16.7
Brinson Partners (Dom. balanced)	16.4
Chancellor (Stockshift 100)	16.3
Mellon Equity (Quant. strat.)	16.2
Pinnacle Assoc. (Balanced)	15.7
Bessemer Trust (Balanced)	15.5

5-year returns

	%
Oxford Capital (Balanced)	28.0
TSA Capital (Strat. TAA)	23.3
Jurika & Voyles (Reg. bal. equity)	21.7
Bankers Trust (TAA)	21.2
Beacon Invst. (Balanced)	20.2
Mellon Equity (Quant. strat.)	20.1
Investment Counselors (Bal.)	20.0
Starbuck, Tisdale & Assoc.	19.3
Bessemer Trust (Balanced)	19.2
Caldwell & Orkin (Total comp.)	19.2
BRS Capital (TAA model)	18.7
IDS Trust (Balanced 50 80)	18.6

10-year returns

	%
BRS Capital (TAA model)	25.0
TSA Capital (Strat. TAA)	21.8
Caldwell & Orkin (Total comp.)	19.6
Wells Fargo Invst. (Three-way)	19.0
Investment Counselors (Bal.)	18.8
Miller, Anderson & Sherrerc (Bal.)	17.7

Top two deciles PIPER + special equity funds

3-month returns

	%
Criterion Invst. (Equity & cash)	4.3
Criterion Invst. (Equity only)	3.9
Securities Res. (Vance Sanders)	3.5
Securities Res. (Dreyfus leverage)	3.4
Jundt Capen (Small cap.)	2.8
Berents Capital (Agg. G)	2.4
Securities Res. (Growth)	2.3
S&P 500	**2.1**
Brinson Partners (1st post ven.)	1.6
Russell 2000	**5.0**

1-year returns

	%
Fred Alger Mgmt (Small cap.)	64.5
Criterion Invst. (Equity only)	42.1
Berents Capital (Agg. G)	39.7
Wall Street Assoc. (Sm. cap. gro.)	39.1
Goldman Asset (Seg. linked)	39.0
Columbus Circle (Comp.)	38.3
Peregrine Capital (Agg. sm. cap.)	37.0
Jundt Capen Assoc. (Small cap.)	36.8
S&P 500	**31.6**
Russell 2000	**16.2**

3-year returns

	%
Jundt Capen Assoc. (Small cap.)	27.9
Fred Alger Mgmt (Small cap.)	23.9
Brinson Partners (1st post ven.)	23.3
Putnam Cos. (Growth)	20.4
Frontier Capital (Small cap.)	19.4
Wall Street Assoc. (Sm. cap. gro.)	19.1
Securities Res. (Spec.)	19.0
Columbus Circle (Comp.)	19.0
S&P 500	**17.3**
Russell 2000	**9.8**

5-year returns

	%
Frontier Capital (Small cap.)	26.7
Jundt Capen Assoc. (Small cap.)	26.2
Columbus Circle (Comp.)	24.7
Putnam Cos. (Growth)	23.5
Putnam Cos. (Emerg. gro.)	23.4
Cramer Rosenthal McGlynn	22.3
Wall Street Assoc. (Sm. cap. gro.)	21.5
S&P 500	**20.3**
Russell 2000	**12.9**

10-year returns

	%
Nicholas-Applegate (Emerg. gro.)	27.0
Wall Street Assoc. (Sm. cap. gro.)	26.3
Wilshire Asset (Sm. co. value)	24.1
Brandywine (Low p/e II sm. cap.)	23.4
S&P 500	**17.6**
Russell 2000	**14.5**

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Fall short

Continued from page 16

Mortgage Association, and Americus Scores on Merck and Philip Morris.

Cheswick, with $300 million under management, also ranked in the top 10% of equity returns for the three- and five-year periods in PIPER +.

Top performer for the three- and five-year periods was NFJ Investment Group Inc., Dallas, with its select equity strategy. The $12 million fund had a compound annual 42.2% for the three years and 39.1% for the five-year period. The figures include the period when this money was managed by NFJ's principals at RepublicBank Dallas, where the select fund started in 1983; NFJ was formed early in 1989.

The strategy is undiversified, with less than 10 stocks at a given time. Stocks are selected according to value variables, such as price-earnings ratios, yields and underlying asset value. The portfolio holds cash if there are not enough attractive stocks to buy. At year end, it had 45% cash and two holdings, **Giddings and Lewis Inc.** and **Rhone-Poulac** Series A preferred, said Ben Fischer, managing director.

McKee Investment Management Co., San Francisco, had the quarter's top fixed-income fund, returning 7.5%. The fund also was No. 1 for the year with 20.6%, second for the three-year period with 11.7%, and back on top for the five-year period with 17.8%. It was too new for the 10-year period.

Stuart McKee, president, said the fund has a slight edge over the typical fixed-income fund because it uses between 40 and 50 stocks, mostly utilities, as bond substitutes when their current yield and dividend growth projections exceed long bond yields by at least three percentage points.

He doesn't consider this fund a balanced fund, however, because the stocks represent a tiny fraction of the S&P 500 and are interest-sensitive vehicles, fluctuating with the bond market.

The composite submitted for PIPER + was between 40% and 50% invested in these substitutes in the fourth quarter, Mr. McKee said. The remainder of the composite was largely in mortgage-related securities. The investment strategy is based on relative value and mathematical risk in fixed-income sectors. The composite totals $72 million.

STW Fixed Income Management Inc., Santa Barbara, Calif., had the best 10-year performance with its long composite, which returned 16.6%. It was second for the five-year period with 16.8%; 10th for the three-year period with 9.3%, fourth for the year with 18.5%, and fifth for the quarter with 5%.

See **Fall short** *on page 23*

Growth

Continued from page 16

burger chain in the Midwest, and certain areas within medical care such as outpatient surgery centers.

The year's No. 2 performer in the PIPER+ universe was Criterion Investment Management Co., Houston, also a growth manager, which reported a return of 42.09% for its equity only fund.

Top finishers over the longer term in the PIPER+ universe included Frontier Capital Management, Boston, which posted a compound annualized 26.67% return on its small-cap fund for the five-year period, compared with the S&P 500's 20.34% and the Russell 2000's 12.9% return. The median fund in the PIPER+ universe returned 18.93% for the five-year period. All performance figures for periods of more than one year are compound annualized.

Jundt/Capen Associates Inc., Minneapolis, also a growth manager, ranked second for the five years with 26.19% on its small-cap fund. The fund earned the highest return for the three-year period with 27.88%, as compared with the PIPER+ median of 15.79%, the S&P Index's 17.3%, and the Russell 2000's Index's 9.82%.

Frontier benefited from the spate of takeovers and restructurings that occurred in the 1980s. The $400 million fund invests in companies with an average revenue of $400 million and an average market capitalization of $200 million.

"Our approach combines both value and growth," said Tom Duncan, executive vice president at Frontier. "We did in 1988 benefit from a lot of takeovers," Mr. Duncan said. "We were looking at the same valuation criteria that LBO acquirers might be looking at."

Restructurings and spinoffs from which the firm has benefited include **Dekalb Corp.**, a conglomerate that restructured to divide its seed and energy operations, and **Westmark International Inc.**, a medical technology company that broke away from Squibb Corp.

For the 10-year period, top performers in the PIPER+ universe were Nicholas-Applegate Capital Management's emerging growth fund, which posted an annualized 27.03%, and Wall Street Associates, which posted a 26.26% return on its small-cap growth equity fund.

Among bank and insurance company commingled funds, the year's top performers followed strategies similar to those used by the top performing PIPER+ managers.

The PIPER funds also monitored certain industry sectors including healthcare cost containment, retail and cellular telephones.

The $31 million Equitable Capital portfolio invests in companies with a median market capitalization of $500 million to $600 million.

Targeting high-growth companies marked by change through the introduction of a new product or the creation of a new market, characterizes the fund's strategy, said Barry Feirstein, managing director.

Equitable's portfolio has a 10% weighting in biotechnology companies. "If one carefully selects his companies, the stocks are relatively cheap relative to their potential," he explained.

An additional 10% is invested in companies specializing in containing health care costs, including **Medco Containment Services Inc.**, a mail-order pharmaceutical concern that provides low-cost prescriptions for corporate and pension health plans.

Mr. Feirstein said other heavily weighted sectors include companies that specialize in power generating equipment to handle electricity shortages, with a 15%

See **Growth** *on page 26*

Fall short

Continued from page 20

"Very frankly, we just bought cheap bonds," said Billy Williams, principal and chief investment officer in long-duration portfolios. STW seeks undervalued, investment-grade securities and doesn't try to time interest rate shifts. Interest rate moves during the past decade, however, benefited managers who stayed long.

"It doesn't take a rocket scientist to do well if interest rates are falling and you're longer than the other managers," Mr. Williams said.

At year end, the long composite, which has about $2 billion in assets, was between 45% and 50% in Treasuries, with the balance divided among corporate, sovereign and supernational bonds. Average maturity was 19 years and average duration, 8.5 years.

The past year was not good for bonds rated below investment grade; three of the bottom five funds in the quarter and four of the bottom five for the year were high-yield funds.

Starbuck, Tisdale & Associates, Santa Barbara, Calif., had the best balanced/TAA performance in the quarter with 5.3%. In the quarter, its $20 million tax-exempt composite was 50% to 60% in equities, especially companies with steady growth in earnings and dividends, 20% to 25% in convertible bonds, and the remainder in intermediate-term Treasuries and cash. Those all were sectors that were favored in the quarter, said L. David Tisdale, president and chief investment officer.

Equity holdings include **Pacific Telesis Group**, **GTE Corp.**, **Johnson & Johnson** and **H.J. Heinz Co.**; convertible holdings include **Church & Dwight Co. Inc.**, **Evans & Sutherland Computer Corp.** and **Noxell Corp.**

The firm considers its strategy balanced, setting its asset allocation on a longer-term basis than tactical asset allocators, Mr. Tisdale said.

Starbuck, Tisdale placed seventh for the year with 27.8% and eighth for the five-year period with 19.3%.

Oxford Capital Management Inc., Timonium, Md., topped the balanced/TAA universe for the three- and five-year periods, with compound annual returns of 24.8% and 28% respectively. It was fifth for the quarter with 3.9% and sixth for the year with 28.7%.

Like Starbuck, Tisdale, Oxford uses convertibles, but counts some in the stock category and some in the bond category, depending on which security they resemble more closely. Convertible holdings include **Compaq Computer Corp.** debentures; equity holdings include **Emerson Electric Co.** and **Kimberly-Clark Corp.** ■

PIPER + fixed-income funds
(periods ended Dec. 31)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	7.53%	20.60%	11.97%	17.78%	16.57%
First quartile	3.58	14.36	8.55	13.08	14.24
Median	3.20	12.30	8.07	12.15	12.83
Third quartile	2.21	10.09	7.50	10.84	12.11
Lowest return	-6.37	-5.07	3.02	8.39	10.50
SLH G/C	**3.61**	**14.22**	**7.93**	**12.00**	**12.24**

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Continued from page 17

Bessemer Trust (A), N.Y	3.3
Deposit Guaranty Nat'l, Miss	3.2
Equitable Capital (No. 1), N.Y	3.2
First Security Nat'l (D), Ky	3.1
NCNB Nat'l Bank, N.C	3.1
Mercantile Bank Joplin (E), Mo	3.1
Commerce Bank, Mo	3.0
Firstier Bank Lincoln, Neb	3.0
Nationwide Life, Ohio	3.0
First Interstate of Arizona	3.0
NBD Trust, Ill	3.0
INB Nat'l Bank, Ind	3.0
LaSalle Nat'l (Core), Ill	2.9
Manufacturers Life (C), Ontario	2.9
Aetna Life, Conn	2.8
S&P 500	**2.1**

1-year returns

	%
SLH Trust (Flex growth 7), Del	51.1
Equitable Capital (No. 4), N.Y	45.4
Chancellor (Select), N.Y	44.7
Lincoln Nat'l (Select), Ind	42.3
Princeton Bank, N.J	41.8
State Street Bank (Matrix syn.)	41.0
Mark Twain Bank, Mo	40.5
Bank of New York	39.3
Chancellor (Styleshift)	38.6
Chancellor (Growth)	38.1
First City Nat'l, Texas	37.4
Metropolitan Life (SA 40), N.Y	37.4
Chancellor (Index plus)	37.2
First Variable Life, Ark	37.1
U.S. Trust Co. of New York	37.0
First of America, Mich	36.9
Connecticut Mutual	36.8
IDS Trust (Core growth), Minn	36.8
First Kentucky Trust	36.8
John Hancock (Divers.), Mass	36.5
First Bank Milwaukee	36.2
Aetna Life, Conn	36.1
Northern Trust (Select), Ill	36.1
Sun Bank, Fla	35.7
First Wisconsin Asset (Growth A)	35.6
Bank One Wisconsin (Growth)	35.3
John Hancock (Concen.), Mass	34.8
Chase-CMB (Spectrum), N.Y	34.7
NCNB Nat'l Bank, N.C	34.5
American Nat'l Chicago (Active)	34.3
Nationwide Life, Ohio	34.3
Union Nat'l Bank Ark. (Low p.e)	34.2
Mercantile Bank, Mo	34.1
Deposit Guaranty Nat'l, Miss	34.1
Equitable Capital (No. 1), N.Y	34.0
First of America (Sm. cap. value)	34.0
Riggs Nat'l Bank, D.C	33.9
Citizens Comm'l (Div. gro.), Mich.	33.3
Puget Sound Nat'l, Wash	33.1
Chase-CMB (Stock & fut. index)	32.8
Firstier Bank Omaha, Neb	32.7
Johnson County Bank, Kan	32.7
Beverly Trust, Ill	32.7
Meridian Invst., Pa	32.7
South Carolina Nat'l	32.6
NCNB Texas (Growth)	32.6
First Trust, Colo	32.5
Pacific Financial (Efficient), Calif	32.4
Chancellor (Enhanced index)	32.3
Summit Trust, N.J	32.1
Southeast Bank, Fla	32.0
S&P 500	**31.6**

3-year returns

	%
United Capital, Colo	25.6
State Street Bank (Matrix syn.)	22.5
Bank of New York	22.0
Equitable Capital (No. 4), N.Y	22.0
IDS Trust (Core growth), Minn	21.8
Chancellor (Select growth)	21.5
First Fidelity Bank (Disc.), N.J	21.5
Sun Bank, Fla	21.3
SLH Trust (Flex growth 7), Del	21.2
Lincoln Nat'l (Select), Ind	21.2
First Nat'l Amarillo, Texas	20.7
U.S. Trust Co. of New York	20.6
Crown Life (U.S. group), Ontario	20.5
John Hancock (Divers.), Mass	20.3
Bank One, Indianapolis (L)	20.2
Connecticut Mutual	19.9
Capital Trust (I), Ore	19.8
NCNB Nat'l Bank, N.C	19.7
South Carolina Nat'l	19.3
Beverly Trust, Ill	19.2
Meridian Invst., Pa	19.2
Wellington Trust (Divers. growth)	19.2
Mark Twain Bank, Mo	18.9
State Street Bank (CM02), Mass	18.8
Chase-CMB (Spectrum), N.Y	18.8
First Variable Life, Ark	18.8
Bank One Wisconsin (Growth)	18.8
Chancellor (Styleshift)	18.7
Summit Trust, N.J	18.7
MTrust (Growth), Texas	18.5
Chancellor (Enhanced index)	18.3
Chase-CMB (Stock & fut. index)	18.3
Employers Life Wausau (SA 1)	18.1
Union Nat'l Bank Ark. (Low p.e)	18.1
First Union Nat'l (Enhanced), N.C	18.0
Aetna Life, Conn	18.0
First Fidelity Bank, N.J	18.0
U.S. Nat'l Bank, Texas	17.9
Bessemer Trust (A), N.Y	17.9
Assoc. Bank Neenah, Wis	17.8
Bessemer Trust, N.Y	17.8
ASB Capital, D.C	17.8
Equitable Capital (No. 1), N.Y	17.7

Continued on page 30

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IDS

Growth

Continued from page 23

to 20% weighting, and cellular telephones at 10%, because, "we believe the prices of cellular phones are going to keep declining" while their geographic penetration will grow.

Strong earnings dynamics have stood Chase Investors Management Corp. CMB's medium-capitalization fund in good stead for both the short and the long term, said Mike Schonberg, managing director of growth equities at Chase. The $164 million commingled fund had the second highest year-end performance in the PIPER universe, at 46.58%.

The fund, which invests in companies between $500 million and $2 billion in market capitalization, and averaging $750 million, also ranked second for the 10-year period ended Dec. 31, with a compound annualized 20.73%. The median PIPER fund returned 16.17% for the 10-year period, while the S&P posted 17.57% and the Russell 2000 returned 14.52%.

"The 10-year (performance) relates to the general philosophy that (by) investing in medium- and small-size companies, you have the opportunity to invest in above-average growth" which, over time, will lead to appreciation in the stock's value, Mr. Schonberg said.

In the midsize sector, Mr. Schonberg said, "you find names that are overlooked." These companies include relatively small, successful operations that are still growing fast, and smaller niche players in bigger business areas.

The fund's biggest single stock holding, weighted at 6.5% at year-end, however, was **Kostco Wholesale Corp.**, which is a wholesale retail club. The fund bought Kostco in 1988 for 15 and by year-end 1989, it had risen to 35, Mr. Schonberg said.

Despite general concern over the retail industry, both Kostco and **Edison Brothers Stores Inc.**, another retail concern, have had strong earnings growth. Chase invested in Edison Brothers in early 1989 when the stock was priced in the mid to high 30s, and it since has soared to its current 63, Mr. Schonberg said.

Other Chase holdings include shares in **Tyson Foods Inc.**, the fund's seventh largest stake, and **Baroid Corp.**, an oil service company.

Over the longer term, MTrust Corp.'s growth fund was the leader for the 10 years, posting an annualized 20.78% vs. the S&P's 17.57% and the Russell 2000's 14.52%. The median PIPER fund returned 16.17%. ■

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Continued from page 26

Valley Nat'l (I), Ariz.	17.7
Chancellor (Index plus)	17.6
Chancellor (Growth)	17.6
Bankers Trust (Index), N.Y.	17.6
S&P 500	**17.3**

5-year returns

	%
Sun Bank, Fla.	28.4
Bank One Indianapolis (L)	25.4
Chancellor (Select growth)	24.9
State Street Bank (Matrix syn.)	24.7
SLH Trust (Flex growth 7), Del.	24.4
State Bank (C), Ohio	24.3
South Carolina Nat'l	24.0
IDS Trust (Core growth), Minn.	23.3
Bessemer Trust, N.Y.	22.7
First Nat'l Amarillo, Texas	22.7
Equitable Capital (No. 4), N.Y.	22.5
Assoc. Bank Neenah, Wis.	22.1
Bank One Wisconsin (Disc.)	21.9
Firstier Bank Omaha, Neb.	21.8
John Hancock (Divers.), Mass.	21.6
State Street Bank (CM02)	21.6
Capital Trust (I), Ore.	21.6
Puget Sound Nat'l, Wash.	21.6
Nationwide Life, Ohio	21.5
NCNB Nat'l Bank, N.C.	21.5
Bank of New York	21.3
Chancellor (Index plus)	21.3
IDS Trust (A), Minn.	21.3
Summit Trust, N.J.	21.2
Southtrust Bank, Ala.	21.2
American Nat'l Chicago (Active)	21.1
Chase-CMB (Stock & fut. index)	21.1
First Fidelity Bank, N.J.	21.1
First of America, Mich.	21.1
Harris Trust (Systematic), Ill.	20.9
Morgan Guaranty (Lg. co.), N.Y.	20.8
U.S. Trust Co. of New York	20.8
SLH Trust (Value 4), Del.	20.8
Barnett Banks, Fla.	20.8
U.S. Nat'l Bank, Texas	20.8
First Fidelity (Disc.), N.J.	20.6
United Capital, Colo.	20.6
Mellon Equity Assoc., Pa.	20.6
Bankers Trust (Index), N.Y.	20.6
Wellington Trust (Diver. growth)	20.6
Travelers (SA 500), Conn.	20.6
Meridian Invst., Pa.	20.6
S&P 500	**20.3**

10-year returns

	%
Sun Bank, Fla.	25.2
First Fidelity (Disc.), N.J.	21.2
Manufacturers Life, Ontario	21.2
First Nat'l Amarillo, Texas	20.6
First NH Invst. (A)	20.2
First Union Nat'l Bank, N.C.	20.1
United Capital, Colo.	20.1
U.S. Nat'l Bank, Texas	19.7
Equitable Capital (No. 4), N.Y.	19.7
Manufacturers Affil. (Growth)	19.6
Manufacturers Detroit	19.6
First Interstate of Oklahoma	19.5
Guardian Insurance (VA 1), N.Y.	19.4
Bessemer Trust, N.Y.	19.4
American Nat'l Chicago (Active)	19.4
Nationwide Life, Ohio	19.3
Connecticut Mutual	19.3
Union Labor Life (SA A), D.C.	19.3
State Street Bank (CM02)	19.2
Markston Invst., N.Y.	19.0
MTrust (Growth), Texas	18.9
MTrust (Value), Texas	18.9
Lake Shore Nat'l, Ill.	18.7
First Nat'l of Omaha (D), Neb.	18.6
Provident Capital, Pa.	18.6
First Variable Life, Ark.	18.6
Bank of New York	18.5
John Hancock (Divers.), Mass.	18.5
First of America, Mich.	18.5
Wheeling Dollar Bank, W. Va.	18.4
Massachusetts Mutual	18.4
Confederation Life, Ga.	18.4
S&P 500	**17.6**

Top two deciles PIPER commingled fixed-income funds

3-month returns

	%
Lincoln Nat'l (Long), Ind.	6.5
Mutual of New York (Priv. place)	5.4
Boatmen's Trust (F), Mo.	5.3
Prudential Rg. Asset (Long)	4.7
Mercantile Bank Joplin, Mo.	4.6
First Nat'l of Maryland	4.5
Equitable Capital (No. 5), N.Y.	4.4
NCNB Texas (Long)	4.3
First NH Invst. (B)	4.3
Riggs Nat'l Bank, D.C.	4.3
Key Trust Co. of the N.W., Wash.	4.2
Key Trust Co., N.Y.	4.2
Signet Trust (Inter.), Va.	4.2
CIGNA Corp. (Active), Conn.	4.2
New York Life Insurance (SA 4)	4.1
IDS Trust (A), Minn.	4.0
Mutual of New York (Inter.)	4.0
New York Life Insurance (SA 8)	4.0
LaSalle Nat'l (Long), Ill.	4.0
Bankers Trust (Mtg. pass), N.Y.	4.0
Pacific Financial, Calif.	4.0
Bank of New York	4.0
Bessemer Trust, N.Y.	4.0
The Phoenix, Conn.	3.9
Chase-CMB (Sec. mtg.), N.Y.	3.9
First Asset Mgmt. (II), Minn.	3.9
First City Nat'l, Texas	3.9
Chase-CMB (Long), N.Y.	3.9
Princeton Bank, N.J.	3.8
Aetna Life (SA 76), Conn.	3.8
Manufacturers Detroit	3.8
Citizens Fidelity (F), Ky.	3.8
Manufacturers Affil. Trust	3.8
Transamerica Life (SA T-2), Calif.	3.8
First Wisconsin Trust	3.8
CoreStates Invst., Pa.	3.8
Comerica, Mich.	3.8
Dominion Trust (Rel. value), Va.	3.8
Fidelity Bank, Pa.	3.8
Liberty Nat'l, Ky.	3.8
Chase-CMB (Index), N.Y.	3.8
First Wisconsin Trust (Index)	3.8
Central Fidelity Bank, Va.	3.8
LaSalle Nat'l (Inter.), Ill.	3.8
ASB Capital, D.C.	3.8
Travelers (SA P), Conn.	3.8
Prudential Rg. Asset (BMI)	3.8
Shawmut Bank, Mass.	3.8
Sun Bank, Fla.	3.7
Dauphin Deposit (Corp.), Pa.	3.7
Sanwa Bank (C), Calif.	3.7
SLH G C	**3.6**

1-year returns

	%
Lincoln Nat'l (Long), Ind.	24.7
Mercantile Bank Joplin, Mo.	20.5
Boatmen's Trust (F), Mo.	19.9
Prudential Rg. Asset (Long), N.J.	19.3
Equitable Capital (No. 5), N.Y.	18.2
Jefferson Trust, Ill.	16.7
Transamerica Life (SA T-2), Calif.	16.7
Chase-CMB (Long), N.Y.	16.4
NCNB Texas (Long)	16.1
Bessemer Trust, N.Y.	15.8
Sunburst Bank, Miss.	15.6
Bank of New York	15.6
First Nat'l of Amarillo, Texas	15.5
First Variable Life (H.Q.), Ark.	15.4
CoreStates Invst., Pa.	15.3
Chase-CMB (Index), N.Y.	15.3
CIGNA Corp. (Active) Conn.	15.3
U.S. Trust Co. of New York	15.2
First Nat'l of Maryland	15.2
Riggs Nat'l Bank, D.C.	15.2
Harris Trust, Ill.	15.2
Connecticut Mutual (Conver.)	15.1
Bankers Trust (Mtg. pass), N.Y.	15.0
Meridian-Delaware Trust	15.0
Manufacturers Detroit	15.0
Manufacturers Affil. Trust	14.9
First Wisconsin Trust (Index)	14.9
Mellon Bond, Pa.	14.9
Comerica, Mich.	14.9
Texas Commerce (Active)	14.8
General American (SA 9), Mo.	14.8
Bank of New York	14.8
Key Trust, N.Y.	14.7
Prudential Rg. Asset (BMI)	14.7
IDS Trust (A), Minn.	14.7
Wellington Trust (Enhanced)	14.7
The Principal, Iowa	14.7
Sun Bank, Fla.	14.7
Midlantic, N.J.	14.6
First Nat'l of Omaha (C), Neb.	14.6
First Wachovia, N.C.	14.6
New York Life (SA 8)	14.6
Fidelity Bank, Pa.	14.6
Barnett Bank, Fla.	14.6
First Asset Mgmt. (II), Minn.	14.5
BancOklahoma Trust	14.5
Bank of New England, Mass.	14.5
SLH Trust (Dir. 5), Del.	14.5
Liberty Nat'l, Ky.	14.5
ASB Capital Mgmt., D.C.	14.5
Firstier Bank Omaha, Neb.	14.4
SLH G C	**14.2**

3-year returns

	%
First Variable Life, Ark.	12.7
Connecticut Mutual (High yield)	11.1

Continued on page 37

(Continued from page 30)

Equitable Capital (No. 5), N.Y.	10.9
Beverly Trust, Ill.	10.7
Union Labor Life (GIC), D.C.	10.4
General American (SA 9), Mo.	10.3
Transamerica Life (SA T-2), Calif.	10.2
General American (SA 6), Mo.	10.2
Mutual of New York (Priv. place.)	9.9
Pacific Financial, Calif.	9.7
Union Labor Life (Accum.), D.C.	9.6
Crestar Bank (Roanoke), Va.	9.6
Meridian-Delaware Trust	9.5
Jefferson Trust, Pa.	9.5
Sanwa Bank (C), Calif.	9.4
Trustmark Nat'l, Miss.	9.4
First Alabama Bank	9.3
First Nat'l of Amarillo, Texas	9.3
Wheeling Dollar Bank, W. Va.	9.3
Harris Trust, Ill.	9.2
First Nat'l of Maryland	9.2
Prudential Rg. Asset (Privest)	9.2
IDS Trust (GIC), Minn.	9.2
The Principal, Iowa	9.1
Capital Trust (GIC), Ore.	9.1
Marine Midland, N.Y.	9.1
Midlantic, N.J.	9.0
First Kentucky Trust	9.0
Mercantile Safe, Md.	9.0
Exchange Nat'l Bank, Ill.	9.0
Bankers Trust (Mtg. pass), N.Y.	9.0
Dominion Trust (Stable cap.), Va.	9.0
Sovran Capital, Va.	8.9
Summit Trust, N.J.	8.9
Morgan Guaranty, N.Y.	8.9
Cullen Bank, Texas	8.9
U.S. Trust Co. of New York	8.8
Travelers Cos. (SA D), Conn.	8.7
CoreStates Invst., Pa.	8.7
Society Nat'l, Ohio	8.7
Boatmen's Trust (F), Mo.	8.7
IAA Trust (B), Ill.	8.7
Signet Trust (Stable value), Va.	8.7
Prudential Rg. Asset (Long)	8.6
Second Nat'l Bank, Ohio	8.6
Trust Co. West (High yield)	8.6
Chase-CMB (Index), N.Y.	8.6
Central Fidelity, Va.	8.6
Signet Trust (Inter.), Va.	8.5
SLH G C	**7.9**

5-year returns

	%
Boatmen's Trust (F), Mo.	16.0
Equitable Capital (No. 5), N.Y.	15.6
First Variable Life, Ark.	15.5
Meridian-Delaware Trust	15.5
Transamerica Life (SA T-2), Calif.	15.4
United Capital, Colo.	15.2
Sunburst Bank, Miss.	14.9
Union Labor Life (SA B), D.C.	14.2
Beverly Trust, Ill.	14.2
Connecticut Nat'l Bank	13.9
The Principal, Iowa	13.7
LaSalle Nat'l (Long), Ill.	13.6
First Nat'l of Amarillo, Texas	13.6
General American (SA 9), Mo.	13.6
NCNB Texas (Long)	13.5
IAA Trust (B), Ill.	13.4
Pacific Financial, Calif.	13.4
Fidelity Bank, Pa.	13.4
Bankers Trust (Mtg. pass), N.Y.	13.4
Travelers Cos. (SA P), Conn.	13.2
ASB Capital, D.C.	13.2
First Kentucky Trust	13.2
Crestar Bank (Roanoke), Va.	13.2
Morgan Guaranty, N.Y.	13.2
Crown Life (U.S.), Ontario	13.2
Metropolitan Life (SA 41), N.Y.	13.2
John Hancock (1D), Mass.	13.1
Harris Trust, Ill.	13.1
Sanwa Bank (C), Calif.	13.1
First Interstate of Arizona	13.1
Sovran Capital, Va.	13.0
Society Nat'l, Ohio	13.0
AmSouth, Ala.	12.9
CIGNA Corp. (Active), Conn.	12.9
First Variable Life (H.Q.), Ark.	12.8
First Wachovia, N.C.	12.8
Manufacturers Life (B), Ontario	12.8
Comerica, Mich.	12.8
Connecticut Nat'l Bank (Inter.)	12.8
CoreStates Invst., Pa.	12.7
Bessemer Trust, N.Y.	12.7
Prudential Rg. Asset (Privest)	12.7
IDS Trust (A), Minn.	12.7
Life of Virginia	12.7
Johnson County Bank, Kan.	12.7
SLH G C	**12.0**

10-year returns

	%
First Variable Life, Ark.	15.4
Boatmen's Trust (F), Mo.	14.6
Beverly Trust, Ill.	14.3
Sovran Capital, Va.	14.2
United Capital, Colo.	14.0
Union Labor Life (SA B), D.C.	13.9
Life of Virginia	13.8
Pacific Financial, Calif.	13.5
First Kentucky Trust	13.5
ASB Capital, D.C.	13.4
Sanwa Bank (C), Calif.	13.3
Bankers Trust (Mtg. pass), N.Y.	13.2
IAA Trust (B), Ill.	13.2
First Nat'l of Amarillo, Texas	13.1
SeaFirst Bank, Wash.	13.1
Morgan Guaranty, N.Y.	13.0
Connecticut Nat'l Bank	13.0
First Interstate of Arizona	13.0
Bankers Trust (A), N.Y.	12.8
Central Fidelity Bank, Va.	12.8
Society Nat'l, Ohio	12.8
Prudential Rg. Asset (Privest)	12.8
Texas Commerce (Active)	12.7
Cullen Bank, Texas	12.7
Fidelity Bank, Pa.	12.7
John Hancock (1D), Mass.	12.7
Crestar Bank (Roanoke), Va.	12.7
First Nat'l of Maryland	12.6
First Wachovia, N.C.	12.6
Mercantile Bank, Mo.	12.6
CIGNA Corp. (Inter.), Conn.	12.6
Bank of New England, Mass.	12.6
SLH G C	**12.2**

Commingled international funds

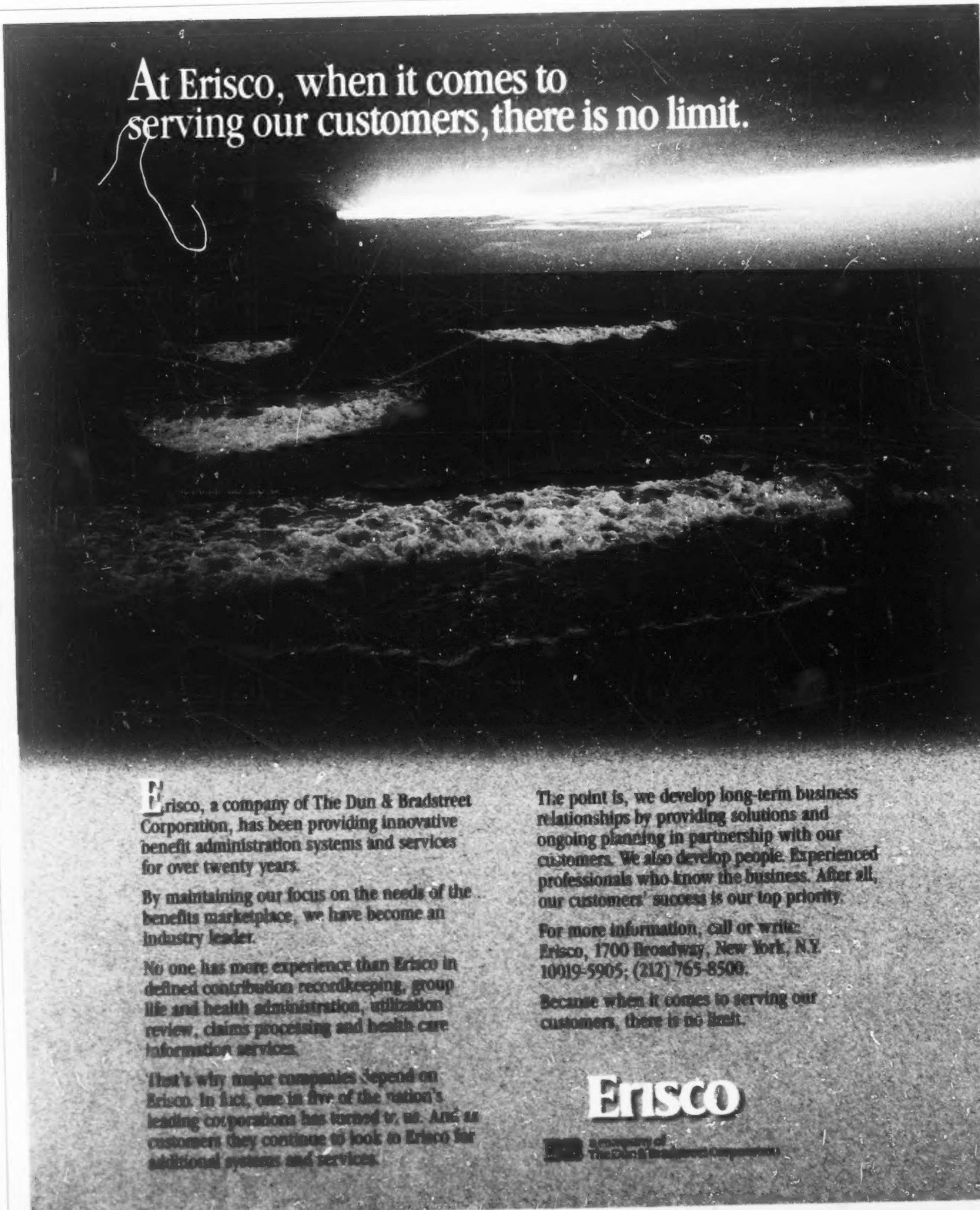
3-month returns

	%
CIGNA Corp. (Eq.), Conn.	13.2
IDS Trust (Eq.), Minn.	11.5
Chase-CMB (Eq.), N.Y.	7.7
Travelers Cos. (SA W), Conn.	7.2
Bankers Trust (Eq.), N.Y.	6.8
Putnam Cos. (Eq.), Mass.	6.6
Fidelity Mgmt. (Overseas eq.)	6.4
NCNB Texas (Stock)	6.4
Wellington Trust (Stock), Mass.	6.2
Morgan Guaranty (Bond), N.Y.	6.2
Morgan Guaranty (Eq.), N.Y.	6.0
PCM Int'l (Global bond), N.J.	6.0
MTrust (Eq.), Texas	5.9
IAA Trust (CTF-I)	5.8
Bessemer Trust, N.Y.	5.4
The Principal (Stock), Iowa	5.2
Wilmington Trust (Eq.), Del.	5.1
American Nat'l Chicago (Eq.)	5.0
Marine Midland (Eq.), N.Y.	5.0
Confederation Life (Stock), Ga.	4.9
Bankers Trust (EAFE index), N.Y.	4.8
FTA Europe & Pacific Index	**4.8**
U.S. Trust, N.Y.	4.7
Wells Fargo (Eq.), Calif.	4.7
MSCI EAFE Index	**4.6**
Travelers Cos. (TIIF), Conn.	4.6
Connecticut Mutual (Overseas)	4.4
PCM Int'l (Global yield), N.J.	4.4
Prudential (Foreign stock), N.J.	4.3
Chase-CMB (EAFE index)	4.3
FTA World Index	**3.9**
MSCI World Index	**3.8**
State Street Bank (Index)	3.7
Chase-CMB (Fixed), N.Y.	3.7
PCM Int'l (Print eq.), N.J.	3.6
MTrust (Bond), Texas	3.0
Trust Co. West (Global)	3.0
WorldInvest (Fixed), N.Y.	2.9
PCM Int'l (Foreign bond), N.J.	2.8
Harris Trust (Eq.), Ill.	2.7
Wellington Trust (Emerg. stock)	2.5
Lincoln Nat'l (SA 22), Ind.	2.4
Assoc. Bank Neenah (World), Wis.	2.0
Wellington Trust (Pacific Basin)	1.2
WorldInvest (Eq.), N.Y.	0.6

1-year returns

	%
Wellington Trust (Emerg. stock)	30.0
CIGNA Corp. (Eq.), Conn.	29.3
Wilmington Trust (Eq.), Del.	29.1
Trust Co. West (Global)	28.4
Confederation Life (Stock), Ga.	28.1
Bankers Trust (Eq.), N.Y.	27.6
Assoc. Bank Neenah (World)	27.3
Putnam Cos. (Eq.), Mass.	26.6
Bessemer Trust, N.Y.	26.6
U.S. Trust, N.Y.	25.6

Continued on page 32



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[illegible]

Travelers Cos. (SA W), Conn.	[illegible]
NCNB Texas (Stock)	[illegible]
Wellington Trust (Stock)	[illegible]
PCM Int'l (Print eq.)	19.4
WorldInvest (Eq.), N.Y.	[illegible]
IDS Trust (Eq.), Minn.	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
Fidelity Mgmt. (Overseas eq.)	[illegible]
Marine Midland (Eq.), N.Y.	[illegible]
FTA World Index	**17.7**
Morgan Guaranty (Eq.), N.Y.	[illegible]
MSCI World Index	**17.2**
Connecticut Mutual (Overseas)	[illegible]
Lincoln Nat'l (SA 22), Ind.	[illegible]
MTrust (Eq.), Texas	[illegible]
Chase-CMB (Eq.), N.Y.	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
FTA Europe & Pacific Index	**10.8**
PCM Int'l [illegible], N.J.	[illegible]
MSCI EAFE Index	**10.8**
[illegible]	[illegible]
Prudential (Foreign stock), N.J.	10.6
American Nat'l Chicago (Eq.)	10.6
Wells Fargo (Eq.), Calif.	10.5
State Street Bank (Index)	9.8
Chase-CMB (EAFE index), N.Y.	9.5
Wellington Trust (Pacific Basin)	9.2
PCM Int'l (Global yield), N.J.	6.4
WorldInvest (Fixed), N.Y.	3.9
Morgan Guaranty (Bond), N.Y.	1.1
MTrust (Bond), Texas	0.9
PCM Int'l (Foreign bond), N.J.	2.3
Chase-CMB (Fixed), N.Y.	3.0

3-year returns

	%
Bankers Trust (Eq.), N.Y.	24.0
Confederation Life (Stock), Ga.	22.9
Wells Fargo (Eq.), Calif.	21.8
FTA Europe & Pacific Index	**21.8**
MSCI EAFE Index	**21.2**
CIGNA Corp. (Eq.), Conn.	21.1
Prudential (Foreign stock), N.J.	21.0
American Nat'l Chicago (Eq.)	20.8
Chase-CMB (EAFE index), N.Y.	20.6
State Street Bank (Index)	20.6
FTA World Index	**19.8**
MSCI World Index	**19.3**
Wellington Trust (Pacific Basin)	19.0
Bessemer Trust, N.Y.	18.1
PCM Int'l (Global bond), N.J.	17.3
Assoc. Bank Neenah (World)	16.6
Wellington Trust (Emerg. stock)	16.6
Chase-CMB (Eq.), N.Y.	16.3
Putnam Cos. (Eq.), Mass.	16.2
NCNB Texas (Stock)	16.2
U.S. Trust, N.Y.	16.1
Travelers Cos. (SA W), Conn.	15.9
Fidelity Mgmt. (Overseas eq.)	15.6
PCM Int'l (Print eq.), N.J.	14.5
Wellington Trust (Stock), Mass.	14.4
WorldInvest (Eq.), N.Y.	13.9
Morgan Guaranty (Eq.), N.Y.	13.8
Marine Midland (Eq.), N.Y.	13.8
Lincoln Nat'l (SA 22), Ind.	13.5
PCM Int'l (Global yield), N.J.	12.9
Chase-CMB (Fixed), N.Y.	12.9
WorldInvest (Fixed), N.Y.	12.7
IDS Trust (Eq.), Minn.	12.6
PCM Int'l (Foreign bond), N.J.	12.3
Morgan Guaranty (Bond), N.Y.	11.7
Connecticut Mutual (Overseas)	11.0

5-year returns

	%
Chase-CMB (EAFE index), N.Y.	36.8
FTA Europe & Pacific Index	**36.6**
MSCI EAFE Index	**36.5**
American Nat'l Chicago (Eq.)	36.5
WorldInvest (Eq.), N.Y.	36.3
Fidelity Mgmt. (Overseas eq.)	36.1
Bankers Trust (Eq.), N.Y.	35.9
Wells Fargo (Eq.), Calif.	35.7
Bessemer Trust, N.Y.	35.0
CIGNA Corp. (Eq.), Conn.	34.3
Chase-CMB (Eq.), N.Y.	33.0
Putnam Cos. (Eq.), Mass.	31.7
Wellington Trust (Pacific Basin)	31.6
Marine Midland (Eq.), N.Y.	31.2
U.S. Trust, N.Y.	30.1
NCNB Texas (Stock)	30.0
Wellington Trust (Stock), Mass.	29.9
Morgan Guaranty (Eq.), N.Y.	29.2
IDS Trust (Eq.), Minn.	28.9
FTA World Index	**28.2**
MSCI World	**28.0**

Continued on page 33

Top PIPER equity funds by size

1-year returns

Over $100 million

	%
Equitable Capital (No. 4), N.Y.	45.4
Chancellor (Growth)	38.1
Metropolitan Life (SA 40), N.Y.	37.4
First of America, Mich.	36.9
John Hancock (Divers.), Mass.	36.5
Aetna Life, Conn.	36.1
Northern Trust (Select), Ill.	36.1
Sun Bank, Fla.	35.7
John Hancock (Conc.), Mass.	34.8
NCNB Nat'l, N.C.	34.5

$50 million to $100 million

	%
Lincoln Nat'l (Select), Ind.	42.3
State Street (Matrix syn.)	41.0
Chancellor (Styleshift), N.Y.	38.6
Chancellor (Index plus), N.Y.	37.2
First Wisconsin (Growth A)	35.6
Chase-CMB (Spectrum), N.Y.	34.7
Deposit Guaranty Nat'l, Miss.	34.1
First/America (Sm. cap. value)	34.0
NCNB Texas (Growth)	32.6
Pacific Financial (Efficient)	32.4

$10 million to $50 million

	%
Chancellor (Select growth)	44.7
Princeton Bank, N.J.	41.8
Bank of New York	39.3
First City Nat'l, Texas	37.4
First Variable Life, Ark.	37.1
Connecticut Mutual	36.8
First Kentucky Trust	36.8
First Bank Milwaukee	36.2
Bank One Wisconsin (Growth)	35.3
Nationwide Life, Ohio	34.3

Under $10 million

	%
SLH Trust (Flex growth 7), Del.	51.1
IDS Trust (Core growth), Minn.	36.8
Union Nat'l (Low p/e), Ark.	34.2
Puget Sound, Wash.	33.1
Johnson County Bank, Kan.	32.7
Crestar Bank (Roanoke), Va.	31.9
Northern States, Ill.	31.8
Manufacturers Life (C), Ontario	31.1
Minnesota Mutual (Index)	30.6
Great West (VAAA), Manitoba	29.8

10-year returns

Over $100 million

	%
Sun Bank, Fla.	25.2
Manufacturers Life, Ontario	21.2
First Union Nat'l, N.C.	20.1
Equitable Capital (No. 4), N.Y.	19.7
Manufacturers Affil. (Growth)	19.6
Manufacturers Detroit	19.6
American Nat'l Chicago (Act.)	19.4
Union Labor Life (SA A), D.C.	19.3
Markston Invst., N.Y.	19.0
MTrust (Growth), Texas	18.9

$50 million to $100 million

	%
U.S. Nat'l Bank, Texas	19.7
MTrust (Value), Texas	18.9
First Wisconsin (Income)	18.1
First Fidelity Bank, N.J.	18.0
C&S Trust, Fla.	17.9
AmSouth, Ala.	17.9
Chase-CMB (Spectrum), N.Y.	17.7
Chancellor (Index plus), N.Y.	17.5
First Wisconsin (Growth A)	17.3
Crestar Bank (5822), Va.	17.1

$10 million to $50 million

	%
First Fidelity (Disc.), N.J.	21.2
First Nat'l Amarillo, Texas	20.6
United Capital, Colo.	20.1
First Interstate of Oklahoma	19.5
Guardian Ins. (VA 1), N.Y.	19.4
Nationwide Life, Ohio	19.3
Connecticut Mutual	19.3
State Street Bank (CM02)	19.2
Lake Shore Nat'l, Ill.	18.7
First Nat'l of Omaha (D), Neb.	18.6

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Top PIPER fixed-income funds by size

1-year returns

Over $100 million

	%
Boatmen's Trust (F), Mo.	19.9
Equitable Capital (No. 5), N.Y.	18.2
Transamerica (SA T-2), Calif.	16.7
Chase-CMB (Long), N.Y.	16.4
CIGNA Corp. (Active), Conn.	15.3
Harris Trust, Ill.	15.2
Bankers Trust (Mtg. pass)	15.0
Manufacturers Detroit	15.0
Manufacturers Affil. Trust	14.9
Mellon Bond, Pa.	14.9

$50 million to $100 million

	%
Prudential Rg. Asset (Long)	19.3
CoreStates Invst., Pa.	15.3
Bank of New York	14.8
Midlantic, N.J.	14.6
Barnett Bank, Fla.	14.6
Liberty Nat'l, Ky.	14.5
Chemical Bank (2), N.Y.	14.3
First Tennessee Invst.	14.1
Travelers Cos. (SA D), Conn.	14.1
Travelers Cos. (Index), Conn.	14.0

$10 million to $50 million

	%
Lincoln Nat'l (Long), Ind.	24.7
Jefferson Trust, Ill.	16.7
NCNB Texas (Long)	16.1
Bessemer Trust, N.Y.	15.8
Chase-CMB (Index), N.Y.	15.3
First Nat'l of Maryland	15.2
Riggs Nat'l Bank, D.C.	15.2
Meridian, Del.	15.0
First Wisconsin Trust (Index)	14.9
General American (SA 9), Mo.	14.8

Under $10 million

	%
Mercantile Bank Joplin, Mo.	20.5
Sunburst Bank, Miss.	15.6
First Variable (H.Q.), Ark.	15.4
IDS Trust (A), Minn.	14.7
LaSalle Nat'l (Long), Ill.	14.3
Crestar Bank (Roanoke), Va.	14.2
First NH Invst. (B)	14.2
Connecticut Nat'l	13.8
Key Trust Co. of N.W.	13.5
First Variable Life, Ark.	13.5

10-year returns

Over $100 million

	%
Boatmen's Trust (F), Mo.	14.6
Sovran Capital, Va.	14.2
Pacific Financial, Calif.	13.5
First Kentucky Trust	13.5
ASB Capital, D.C.	13.4
Bankers Trust (Mtg. pass)	13.2
Morgan Guaranty, N.Y.	13.0
Prudential Rg./Asset (Privest)	12.8
Texas Commerce (Active)	12.7
Fidelity Bank, Pa.	12.7

$50 million to $100 million

	%
United Capital, Colo.	14.0
Life of Virginia	13.8
Bankers Trust (A), N.Y.	12.8
Marine Midland, N.Y.	12.3
Travelers Cos. (D), Conn.	12.2
Bankers Trust (B), N.Y.	12.1
CoreStates Invst., Pa.	12.0
Chancellor (Inter.), N.Y.	12.0
C&S Trust, Fla.	11.9
Massachusetts Mutual	11.9

$10 million to $50 million

	%
Beverly Trust, Ill.	14.3
Sanwa Bank (C), Calif.	13.3
IAA Trust (B), Ill.	13.2
First Interstate of Arizona	13.0
Central Fidelity, Va.	12.8
Society Nat'l, Ohio	12.8
Cullen Bank, Texas	12.7
First Nat'l of Maryland	12.6
Key Trust, N.Y.	12.6
MONY (Priv. place)	12.5

Under $10 million

	%
First Variable Life, Ark.	15.4
Connecticut Nat'l	13.0
Crestar Bank (Roanoke), Va.	12.7
Second Nat'l Bank, Ohio	12.4
Oregon Bank	11.8
Sunburst, Miss.	11.6
Valley Nat'l (II), Ariz.	11.6
First Variable Life (H.Q.), Ark.	11.5
First Trust, Colo.	11.4
First NH Invst. (B)	11.4

Continued from page 32

Travelers Cos. (SA W), Conn.	27.2
PCM Int'l (Global bond), N.J.	26.1
WorldInvest (Fixed), N.Y.	22.6
Chase-CMB (Fixed), N.Y.	21.7
PCM Int'l (Foreign bond), N.J.	21.4
Morgan Guaranty (Bond), N.Y.	19.1

10-year returns

	%
MSCI EAFE Index	**22.8**
U.S. Trust, N.Y.	22.2
American Nat'l Chicago (Eq.)	22.1
Putnam Cos. (Eq.), Mass.	20.9
MSCI World Index	**19.9**
Morgan Guaranty (Eq.), N.Y.	18.7
Morgan Guaranty (Bond), N.Y.	12.3

Top two deciles PIPER special equity funds

3-month returns

	%
Equitable Capital (Growth)	[illegible]
Princeton Bank (Emerg. gro.), N.J.	5.9
Crestar Bank, Va.	4.9
Chancellor (Emerg. health care)	4.3
First Asset Mgmt. (II), Minn.	3.9
Markston Invst. (VA 15), N.Y.	3.4
First Wisconsin (Growth B)	3.0
The Phoenix (Growth S), Conn.	2.5
Associated Kellogg (Growth), Wis.	2.3
SLH Trust (Growth 2), Del.	2.1
S&P 500	**2.1**
Trust Co. West, Calif.	2.0
Planters Nat'l (Carolinas), N.C.	1.8
Connecticut Nat'l Bank (Sup.)	1.4
Texas Commerce	1.4
Equitable Capital (Tangible asset)	0.9
Comerica, Mich.	0.6
Russell 2000	**5.0**

1-year returns

	%
Equitable Capital (Growth)	47.7
Chase-CMB (Med. cap.), N.Y.	46.6
Trust Co. West, Calif.	41.7
Chancellor (Emerg. health care)	40.0
First Wisconsin (Growth B)	38.5
Princeton Bank (Emerg. gro.), N.J.	37.8
IDS Trust (Emerg. gro. F), Minn.	37.1
The Phoenix (Growth S), Conn.	36.7
Putnam Cos. (Growth), Mass.	36.5
Equitable Bank, Md.	36.5
Meridian Invst. (Quest), Pa.	36.1
Lincoln Nat'l (Opp.), Ind.	35.5
SeaFirst Bank (Northwest), Wash.	35.4
MTrust (Growth), Texas	34.9
Mutual of New York	34.6
S&P 500	**31.6**
Russell 2000	**16.2**

3-year returns

	%
NCNB Texas	33.9
First City Nat'l (G-1), Texas	28.2
Wellington Trust (Spec. sit.)	25.0
Connecticut Nat'l Bank (Sup.)	23.9
Mutual of New York	22.2
Equitable Capital (Tangible asset)	21.9
First Asset Mgmt. (II), Minn.	21.4
The Phoenix (Growth S), Conn.	20.7
Putnam Cos. (Growth), Mass.	20.4
Connecticut Bank	19.7
Meridian Invst. (Quest)	19.5
SLH Trust (Small cap. S), Del.	19.4
Markston Invst. (VA 15), N.Y.	18.8
Deposit Guaranty (Opp.), Miss.	18.[illegible]
S&P 500	**17.3**
Russell 2000	**9.8**

Continued on page 34

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PIPER

Continued from page 1[illegible]

Among PIPER fixed-income funds, the $[illegible] Long Bond Account of Lincoln National Investment Management Co., Fort Wayne, Ind., [illegible] funds [illegible] the PIPER [illegible] and the [illegible] 24.[illegible] respectively [illegible] for the Shearson Lehman Hutton [illegible].

[illegible]

Mr. Blume said the bond [illegible] was [illegible] in 1989 and he felt high-quality bonds would do well because of falling interest rates and the economic slowdown.

[illegible]

In high yields, we are looking for credits with upside potential and are trying to avoid volatility. Our performance is due to the bonds we don't own," said Rebecca [illegible], vice president of Associated Capital Investors, the investment arm of Monarch Capital Corp., which owns First Variable Life.

Ms. [illegible] said managers of the $1[illegible] million fund spend 100% of their time on credit work and buy nothing but coupons.

"I have never bought so few zeros as I have in 1989," Ms. [illegible] said, in reference to the lower amount of low-quality junk bonds on the market.

Beatrice's Trust placed second during the 10-year period with 14.6[illegible]%, and Beverly Trust Co., Chicago, was third, returning 14.28%, against 12.24% for the Shearson index. ■

PIPER fixed-income funds
(periods ended Dec. 31)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	6.48%	24.73%	12.69%	16.00%	15.36%
First quartile	3.62	14.19	8.34	12.35	12.36
Median	3.33	13.01	7.83	11.39	11.62
Third quartile	2.92	11.72	7.34	10.28	11.11
Lowest return	2.01	1.97	4.71	4.53	7.97
SLH G C	**3.61**	**14.22**	**7.93**	**12.00**	**12.24**

Realty

Continued from page 17

open-end funds — Metropolitan's $95 million Real Estate Fund, with a 10.03% return, and Prudential Real Estate Investors' $4.5 billion PRISA I fund, with 9.45% — scored above the real estate median open-end commingled fund return of 9.39% for the 12 months ended Sept. 30.

The large insurance company open-end commingled funds generally invest in some of the largest, high-quality properties in particular areas.

According to some insurance company executives, it may be that strategy that is giving them an edge over many of the more specialized funds in a real estate market where there is high vacancy in the office sector and some over-building in small retail properties.

The Equitable Prime Property Fund has 76 office buildings, of which 84% are high rises and 74% are in downtown central business districts, said Harry D. Picandri, senior executive vice president in Equitable's New York office.

It is critical that most of the office buildings in the portfolio are in the central business districts, he said, because it is in the suburban markets where there are serious problems, including some foreclosures, on office buildings.

The Prime Property Fund also owns 28 large regional malls, among the highest performing real estate in the past five years, and eight of the malls are being renovated or expanded to maintain retail dominance in their markets.

For the year ended Sept. 30, however, two specialized funds did better than any of the broad-based funds. The John Hancock Timber Resources Group, Boston, earned a 43.57% return and Los Angeles-based Sanwa Bank's Real Estate Fund F had a 23.08% return.

The performance figure for Hancock Timber, however, is mainly the return for three separate accounts, although it includes one smaller commingled fund, with total assets of $600 million for the four funds.

The Hancock commingled fund had the lower performance, 21%, relative to the separate accounts for the period.

The high return for the combined investments in timber came mostly from appreciation, including growth of the actual trees, and is not likely to be repeated every year, according to Rick Smith, director of client relations with John Hancock Timber Resources.

The Sanwa fund has only $4 million in net assets and owns one property, an office building north of San Diego.

Following Metropolitan's Tower Fund was Star Bank, Cincinnati, whose Personal Trust Fund returned 13.13% for the 12 months. The pool is not an employee benefit fund.

The fifth highest return, 12.93%, also came from a Star Bank fund, the $7 million Employee Benefit Real Estate fund. It is a real estate investment trust that invests in real estate securities, said Keith Lee, vice president and director of research for Star Bank.

Another open-end specialty fund that did well for the year was Prudential's $120 million Union Mortgage Account, with a 12.88% return. It invests in the fixed mortgages of buildings built with union labor.

Prudential's $817 million PRISA II also got high performance for the year with a 11.59% return.

It invests in high-quality, large properties, but it isn't as diversified as PRISA I, according to Wes Lockwood, a vice president with Prudential, Newark, N.J.

Among closed-end funds, the highest performance for the year ended Sept. 30 came from Chicago-based JMB Institutional Realty Corp.'s Group Trust II with an investment return of 18.31%. It was followed by JMB's Group Trust I with 14.28%.

Both funds have more than $400 million in net assets each, and are perennial top performing funds for the three- and five-year periods also.

Each is heavily invested in retail malls, but include large office buildings as well.

For the one-year period, the third best performing closed-end fund was Los Angeles-based TCW Realty Advisors' Fund III, with $220 million in net assets. Almost one-half of its assets, 46%, are in high-performing industrial properties, helping the fund to reach its 13.68% return.

Next came Fund II of LaSalle Advisors Ltd., Chicago, with a 13.55% return. The fund, with $363 million in net assets, has about 70% of its assets in large office buildings, mostly in downtown central business districts.

Lehndorff & Babson Real Estate Counsel, Dallas, Property Fund I came in fifth for the year at 12.98%.

The $50 million fund has about 50% of its assets invested in retail properties.

The closed-end fund median return for the year was 7.85%. ■

Continued from page 1[illegible]

5-year returns

NCNB Texas	34.2
SLH Trust (Growth 2), Del.	31.2
SLH Trust (New values 3), Del.	30.6
Connecticut Nat'l Bank (Sup.)	24.5
Assoc. Bank Neenah (Reg.), Wis.	24.3
Chase-CMB (Med. cap.), N.Y.	24.1
Putnam Cos. (Growth), Mass.	23.5
Assoc. Bank Neenah (Inc.), Wis.	22.8
Meridian Invst. (Quest), Pa.	22.2
Equitable Capital (Tangible asset)	22.1
Trust Co. West, Calif.	21.7
SLH Trust (Small cap. 5), Del.	21.1
S&P 500	**20.3**
Russell 2000	**12.9**

10-year returns

MTrust (Growth), Texas	20.8
Chase-CMB (Med. cap.)	20.7
Provident Capital, Pa.	20.1
First Wisconsin (Growth B)	19.4
First Asset Mgmt. (II), Minn.	19.4
Chancellor (Value), N.Y.	19.2
S&P 500	**17.6**
Russell 2000	**14.5**

U.S. developers have the edge

PHILADELPHIA — American developers going to Europe will have several advantages over European developers, according to James D. Noteware, national real estate director for Laventhol & Horwath, a real estate consulting and accounting firm.

Many American corporations in Europe would prefer to deal with Americans, and are frustrated by the European slowness and inefficiencies of documentation, currency translation and tax problems, said Mr. Noteware.

Also, he said, American developers are willing to take risks, while European developers often build only in tight markets after someone else has obtained permission to build.

While European builders think in small-term projects — such as 100,000-square-foot office buildings — Americans build larger projects, which Americans in Europe want and need.

Another advantage for Americans is that European financing of real estate is very simplistic and localized. The European real estate capital markets are immature and inefficient, while American developers are more experienced at flexible and creative borrowing, he said.

Americans also have a better ability to deal across borders, he said. Europeans tend to have experience only in their home countries.

Mr. Noteware cautioned, however, that local building regulations, particularly land use and planning restrictions, are often more significant in Europe. U.S. developers without first-hand knowledge of local market regulations and market needs could find themselves in trouble, he said.

He suggested some Americans should develop joint venture partnerships with European developers, local governments or corporate tenants. ■

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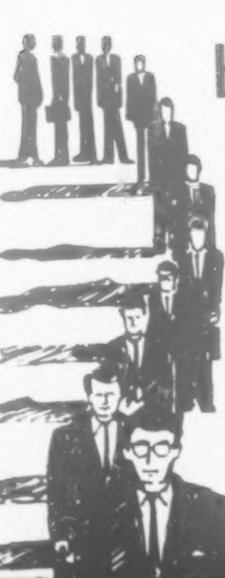

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Office vacancies still a blight on real estate

By Steve Hemmerick

LOS ANGELES — No decline in office vacancies is expected again this year, a continuing problem that has caused a nationwide erosion in office rents and sinking investment performance, according to researchers at TCW Realty Advisors, Los Angeles.

The national office vacancy rate was 19.2% at year-end 1989, down slightly from 19.7% a year ago and the peak of 20.5% in mid-1987.

But according to Jane Holmberg Dorrel, a partner and research director at TCW Realty's investment research division, the average vacancy rate will increase to 19.4% by midyear.

One problem keeping the vacancy rate high is the slower growth in office sector employment for the year ended June 30.

"Absorption in the past 12 months was the lowest in seven years; it should be even lower next year as the economy slows," Ms. Dorrel said. "We are beginning to see that now."

There has been some reduction in office construction. TCW researchers report there is 155.9 million square feet of space under construction today, down 7% from a year ago and a sharp fall from the peak of 252.6 million square feet in mid-1985.

Total office construction activity has fallen off 38% in the last four years, according to TCW data.

Building permits, an indicator of planned construction, also are down, and it looks like office construction will decline by about 10% to 15% in 1990.

Ordinarily, that would give landlords, many of them pension funds with billions of dollars invested in office buildings, a breather and indicate rising rents.

But Ms. Dorrel said during the year ended June 30, the nation absorbed 90.4 million square feet of office space, a 7.8% decline from the previous 12 months. It is also the lowest annual absorption rate since TCW began tracking national office vacancies in 1983.

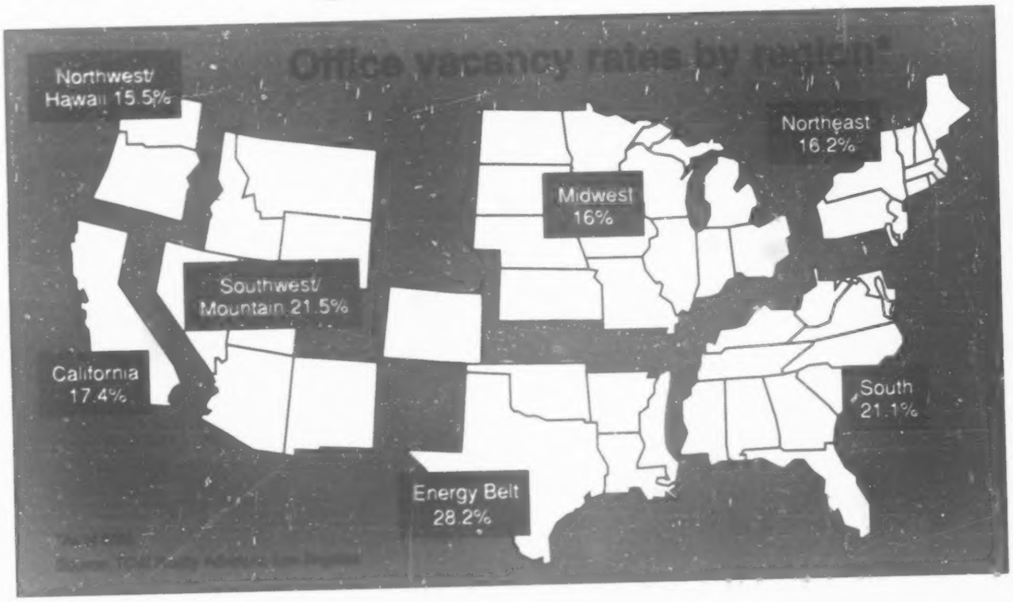
She also said recent employment figures suggest future office space absorption levels will continue to decline in the United States as a whole. There is 25% more office space due for completion in the coming 12 months than the amount of office space absorbed last year.

The situation is particularly troublesome in central business districts or downtown areas, where for the year ended June 30, construction of office space fell 1.5%, but the net absorption rate fell even faster at 2.2%.

As a result, investors can expect little relief from high vacancy rates in the coming year and shouldn't expect a return to more normal office vacancy levels until the late 1990s.

In the meantime, TCW researchers point out, investors continue to be hurt by the high vacancy levels. There is a strong negative correlation between the vacancy levels and a cumulative decline in real effective rents, according to TCW data.

Effective rent is actual rental income minus any free rent or costly modifications for the tenants. TCW researchers found that effective rents have declined an inflation-adjusted 28% between January 1984 and July 1989.



The decline in effective rents has been mounting up fast, but the cumulative effect has almost gone unnoticed except for the damage done in return numbers to pension funds and other large holders of office properties.

TCW researchers emphasize the relationship between rents and office vacancy levels indicates that the only way to have real rental rate increases is for vacancies to decline. The data show strong economic growth alone won't increase effective rents, as some have argued.

But there is good news, Ms. Dorrel said. There are great variations in regions, cities and submarkets. For example, suburban office market construction has been declining faster than office space absorption. Since mid-1985, suburban office construction levels have declined almost 50%, and construction activity in the suburbs declined 9.7% during the first six months of 1989. In comparison, absorption rates have declined 9.3% since mid-1985 and have dropped 3.2% during the first six months of 1989.

In the Energy Belt states, where some of the worst office vacancy problems exist, there was a 48.9% decline in construction activity during the year ended June 30 from the previous year.

California was the only area measured by TCW with an increase in office construction. For the year ended June 30, construction increased 8.1%. In the Northeast, office construction declined 12.2%; in the Midwest, it was down 7.9%; in the South, it dropped 9.8%.

In general, suburban office markets have less vacant space than downtown central business districts. TCW researchers say that if there were no new construction, it would take 4.2 years to absorb all the vacant office space in the suburbs vs. six years in downtown areas.

The cities where it would take the longest to absorb available metropolitan office space, and the time required, are: Oklahoma City, 85.9 years; Detroit, 38.8 years; Jacksonville, Fla., 36.8 years; Tulsa, Okla., 34.9 years; San Francisco (East Bay), 31.6 years; Dallas, 19.6 years; San Antonio, Texas, 18.9 years; Memphis, Tenn., 14.8 years; Philadelphia, 12 years; and Atlanta, 10.7 years.

Metropolitan office markets where it would be easiest to absorb available office space, and the time needed, are: Norfolk-Virginia Beach, Va., 1.6 years; San Jose, Calif., 1.7 years; Orlando, Fla., 1.9 years; Honolulu, 2.4 years; Austin, Texas, 2.6 years; Hartford, Conn., 2.7 years; Boston, 2.9 years; and Chicago, 3 years.

New York has 17.5 years and Los Angeles 9.8 years of available office space. ■

County to reduce contributions

By Steve Hemmerick

LOS ANGELES — Los Angeles County Employees' Retirement Association trustees intend to reduce employer contributions to the fund by an estimated $730 million in the 1990s, and increase benefits for retirees, thanks to last decade's market gains and a decision to value plan assets at market, rather than at cost.

The fund will set aside $200 million to adjust payments to the system's 19,000 retirees to within 75% of the income they had at retirement, before it was effectively reduced by inflation.

The fund assets, carried at their $8.1 billion cost, will be revalued to market over a five-year period. The current market value is approximately $10 billion.

The first step in the change to market valuation will reduce the retirement association's unfunded liability by $872 million.

As a result, the required employer contribution can be reduced as well.

If the markets were to fall sharply, however, the county's contribution would have to increase, Charles Conrad, administrator for the retirement plan, explained.

But the county isn't expecting that to happen. Richard B. Dixon, chief administrative officer for the county, encouraged the retirement association to make the actuarial change, and to grant the cost-of-living increase.

Mr. Dixon described the changes as "mutually beneficial" to the county and the retirees.

While corporate plan assets are marked to market, many public plans have not been. Valuing retirement system assets on a cost basis was a common practice for public plans when all assets generally were in bonds and volatility of the bond market was low. Some public plans have been slow to change to market valuation.

For the first six months of 1990, Los Angeles County's contribution to the retirement plan will be reduced by $28.8 million. Last fiscal year, the total employer contribution to the plan was $384 million. Benefit payments were $390 million.

Barring a sharp drop in the stock or bond markets, the county contribution to the plan should be reduced every year and reach a high in reductions of $97.3 million for the fiscal year 1998-'99, according to TPF&C, Los Angeles, the plan's actuary.

For the retirees, the retirement board is allocating $51.2 million to increase benefits in the current year. The board also set aside another $150 million for future benefits when the retirement plan doesn't have surplus investment earnings to adequately continue funding the cost-of-living increase.

Investment earnings are used to fund the plan at an assumed rate of 8% and provide 1% of the fund's total assets as a reserve for deficiencies. Investment returns above that amount are considered surplus and can be used to fund supplemental cost-of-living increases, according to the county government code. ■

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Junk

Continued from page 1

yield bond market and the resulting huge write-offs suffered by First Executive Corp., an insurance company prominent in the market for termination annuities, have spurred insurance industry analysts, rating agency experts, state and federal insurance regulators and others to scrutinize the quality of real estate loans on commercial properties, residential mortgages, leveraged buy-out loans and other investments.

While the financial health of the insurance industry apparently is very strong and is supported by a diverse asset base, these experts are growing more concerned about these other assets, some of which represent a large percentage of the insurance industry's $1.3 trillion in total assets.

Frederick Townsend, president of Townsend & Schupp Co., Hartford, Conn., a life insurance industry specialist, said people are getting more concerned about the industry's real estate holdings, particularly commercial mortgages, and some firms' investments in troubled subsidiaries (e.g., property and casualty subsidiaries) and those holding affiliate parent company securities.

"We're reaching a peak where everyone is concerned about the companies they are doing business with," he said.

Junk bonds make up a small percentage of most companies' assets, and the industry's overall assets and losses have been insignificant. Non-investment-grade bonds are less than 3% of industry assets. Insurance companies are estimated to own about 30% of the $200 billion in junk bonds.

Troubled real estate investments have been mounting for many investors, from insurance companies to pension funds to commercial banks. Some insurance companies have taken write-offs for bad real estate investments.

"They (the insurance industry) don't have to disclose the quality of the insurer's asset portfolio. It's a real Sherlock Holmes game sometimes," said Jim Kleiman, vice president at Conning & Co., a Hartford, Conn., investment firm specializing in the insurance industry. "There are no ratings to overall portfolio quality."

The focus of the capital markets and Capitol Hill last week was the bankruptcy filing by junk-bond pioneer Drexel Burnham Lambert and the links between the investment bank and First Executive. First Executive, which wrote annuities for many major corporations to cover their employees' benefits and is famous for investing heavily in junk bonds, took a fourth-quarter write-down of $515 million largely because of defaults and losses in its junk bond portfolio. Many top-notch companies purchased annuities from First Executive because it was a low-cost provider.

That added to an uncomfortable fear that companies weren't exercising much care in selecting an annuity or GIC provider and that looming in the wings were more insurance companies with junk bonds and other investments deemed risky enough to threaten the pensions of millions of Americans.

"It's always been the ultimate nightmare of (pension plan) reversions," said Karen Ferguson, director of the Pension Rights Center, Washington. "Ever since reversions started we have been hearing retirees say, 'the annuity writers will be able to pay me for

10 largest group annuity writers

Rating	Writer	Amount $ bils.	% bonds	% long-term investment-grade holdings
A+	Metropolitan	8.2	53	96
A–	Aetna Life	5.6	30	93
A+	Equitable Life	3.9	27	87
A+	New York Life	3.2	56	97
A+	John Hancock	2.9	35	90
A+	Principal Mutual Life	2.8	29	88
A+	Prudential	2.5	44	87
A+	Mutual Life of New York	1.9	27	88
A	Provident Nat'l Life	1.6	56	98
A+	Hartford Life	1.4	65	100

Table based on year-end 1988 data, which is the latest available. A.M. Best's top rating is A+.
Source: A.M. Best Co. Inc., Oldwick, N.J.

The insurance industry and the Pension Benefit Guaranty Corp. have gone out of their way to assure pensioners, regulators and lawmakers that in the PBGC's 15-year history there never has been a case of an insurance company failing and not paying annuities.

The insurance industry is especially worried that "a heretofore secure pension alternative — the annuity — is being tarred and feathered," said Michael Romig, general counsel at the American Council of Life Insurance, Washington. That, he said, is wrong; annuities are safe.

Labor Secretary Elizabeth Dole told Sen. Howard Metzenbaum in a letter Feb. 12 the PBGC has an inventory of 13,000 standard terminations pending, and substantially less than half — preliminary data indicate 15% — of these cases involve the purchase of annuity contracts. The rest of the terminated plans are paying out benefits in lump sums.

The top 10 group annuity providers include Metropolitan Life Insurance Co., Aetna Life Insurance Co., Equitable Life Assurance Society of the United States, New York Life Insurance Co. and John Hancock Mutual Life Insurance Co. While all have junk-bond holdings, the holdings are not a significant percentage of assets.

"With a rare exception, these companies are not heavily invested in junk bonds," Mr. Romig said. "There's never been a qualified annuity plan that failed to make payments."

Mr. Romig said companies should carefully select a high-quality annuity or GIC provider and examine the quality of its assets. He said one positive to come out of the crisis with First Executive is that companies will be more thorough in the selection process.

Long-term bonds and mortgage loans still represent the vast majority of the insurance industry's holdings, totaling more than 76% of the overall asset portfolio, according to A.M. Best Co., an Oldwick, N.J., company that tracks the insurance industry. Of the $1.3 trillion in insurance industry assets, the assets of the 125 leading companies accounted for 84.3% of the total. About 46.3% of the top 125 companies' assets were invested in bonds — with an estimated 94% in investment-grade bonds and 6% in non-investment grade bonds; 21.6% in mortgages; 12.1% separate accounts; 4.6% policy loans; 3.9% stocks; 2.7% real estate; 2.4% cash and other short-term investments; and 6.4% other investments.

The industry's bond holdings improved in quality during 1988, A.M. Best said. However, the aggregate investments in below investment-grade securities and delinquent and non-performing mortgage loans continued to rep

tional reserves.

The consensus of insurance industry analysts is that the industry's overall exposure to junk bonds is limited. Some of the leading insurance industry executives point out their junk bond exposure is minimal relative to other asset holdings. What high-yield instruments they do hold are on the high quality end.

At USF&G Corp., Baltimore, the firm's high-yield bond portfolio, which represent 6.9% of consolidated investments, were purchased with confidence and will continue to be held with confidence, said Paul Schlough, vice president, investor relations at USF&G. The bulk of their non-investment-grade bonds are rated single B or better. A rating of BBB is the lowest rating considered to be investment grade.

"We're not looking to sell just because there's some worry out there," Mr. Schlough said. "These bonds are being held for the longer term. We are expecting to hold them to maturity."

At Presidential Life Insurance Co., Nyack, N.Y., publicly traded junk bonds represented 27.5% of the company's holdings Dec. 31, and of that, a hefty portion was senior securities and secured securities, said Stan Rubin, vice president-investments.

It is particularly essential to consider an insurer's total asset base when determining the potential risk high-yield holdings might represent, Mr. Rubin said. In the past year, Presidential Life's exposure to publicly traded junk bonds has declined $60 million, while its asset base has grown more than $400 million.

Policyholders also must consider the firm's investment philosophy with respect to high-yield instruments. "The problem with the junk market is a lot of people thought it was liquid," Mr. Rubin said. "We approach it from a long-term investment."

At CIGNA Investments Inc., Hartford, Conn., junk bonds represent 1% to 1.5% of the firm's total fixed income holdings of $31 billion, said Robert W. Burgess, senior vice president. The investments in junk are high quality bonds, added David Marks, senior vice president.

"For us it really is a non-event," Mr. Marks said, referring to the events at Drexel.

Looking ahead, the insurance industry, like other investors, could face tough times with regard to some of its investments including real estate and mortgages, leveraged buy-out loans and corporate bonds.

Corporate bond defaults totaled $6 billion in 1989, according to Standard & Poor's Corp., New York. S&P believes annual defaults could approach $15 billion in a difficult economic environment. The rating agency says the full

bumper crop of highly speculative bonds sold in the 1980s. Moody's Investors Service, New York, said 50 U.S. companies defaulted on about $9.3 billion of long-term debt securities in 1989, a record it believes is almost certain to be broken in 1990.

Conning & Co. has expanded its study of insurance industry assets to include all real estate assets in light of the surfacing problems with real estate loans. Mr. Kleiman noted only stocks and bonds are covered by insurance reserve funds state require; other invested assets are not covered. A subcommittee of the National Association of Insurance Commissioners is studying that problem.

In a recent report Moody's also warned GICs are at the heart of the U.S. life insurance industry's immediate capital shortage. The rating agency said the growth in GIC business has come at the expense of the life insurance industry's historically strong capitalization levels.

Moody's noted the median capitalization ratio has declined for the leading life insurance firms to 6% in 1988 from 7.1% in 1984 while the median risk-adjusted capital ratio slipped to 90% from 110%. A number of insurers have reduced new GIC sales because of

California mulling seat on Drexel panel

By Barry B. Burr

NEW YORK — The California Public Employees' Retirement System, as one of the largest lenders to Drexel Burnham Lambert Group Inc., may take an unprecedented step of seeking a seat on the creditors committee being formed in the investment bank's bankruptcy proceedings.

The pension fund's $25 million note makes it DBL's fourth largest creditor.

Junk bonds and other debt rated below investment grade represent only 2% of the $57 billion fund's $23 billion fixed-income portfolio and less than 1% of its total assets, said DeWitt Bowman, chief investment officer of the Sacramento-based fund.

Of the junk portfolio, Mr. Bowman said it has had one default — Walter Industries Inc., Tampa, Fla., which filed for bankruptcy protection in December. The fund holds three Walter debt issues, totaling $22 million.

Aside from the California Employees — the lone pension fund among the major creditors — most of the large creditors of Drexel Burnham Lambert are foreign lenders, mainly Japanese institutions, according to the investment bank's bankruptcy filing.

In all, DBL owes some $3 billion to some 2,000 creditors.

Among the largest creditors are 15 foreign institutions, together holding $266.3 million, including $164.7 million held by nine Japanese institutions.

Taiyo Mutual Life Insurance Co., Tokyo, is DBL's largest creditor, holding $69.7 million in private placement debt.

Seven U.S. institutions hold a total of $147.7 million in DBL debt. Home Capital Services Inc., New York, a unit of AmBase Corp., with $42.7 million in a master note agreement, is DBL's second largest creditor.

Other major creditors include the Bank of China, Beijing, and the Bank of Ireland, Dublin, each of which is owed $20 million from bank loans; CERA, C.V., Leuven, Belgium, which holds a $10.6 million medium-term note; and the Korea Exchange Bank, Seoul, which holds $10.5 million in commercial paper.

The California fund's DBL note was rated BBB, the lowest investment-grade rating, in 1986 when the fund purchased the debt in a private placement.

"We are now an unsecured creditor and will be attempting to recover as much as we can," said Mr. Bowman.

Seeking a seat on the creditors committee is a "determination that has not been made," he added. Such a membership would be unprecedented for the fund. "We haven't had the experience before," Mr. Bowman added.

Mr. Bowman said Drexel's bankruptcy has roiled the $200 billion junk bond market, although the California fund is seeking buying opportunities.

"I do think there is greater distress on (junk bonds)," he said, because of the loss of DBL and its own investment portfolio of junk bonds, estimated at a $1 billion market value, which likely will be liquidated. In addition, he cited the financial troubles of First Executive Corp. and its insurance company unit, which has a huge junk-bond portfolio, reported at half of its $19 billion in assets. Also, he cited the debacle in the savings and loan industry, which has depressed the market because of new regulations requiring the institutions to sell their junk bonds, regardless of the financial strength of their issuers.

In the short run, Mr. Bowman said this will hurt the junk portfolios of investors who have to raise cash. "But we don't have to sell," he said. "In the long run, the distress market is creating buying opportunities. We are looking to see if there are buying opportunities, (although) we haven't purchased any yet." ■

Firm expands to Japan, U.K.

NEW YORK — Equitable Capital Management Corp., New York, with $38 billion under management, has made its first foreign expansion by opening offices in Tokyo and London.

In Tokyo, Equitable Capital Management Japan Ltd. will be headed by Takahiro Fujino, who has spent the past 27 years with the Bank of Tokyo Ltd. in Europe, Latin America and North America.

To head the London office, Equitable has hired Axel K.A. Hansing, who most recently served as an executive vice president in the New York branch of Bayerische Hypotheken-und Wechsel-Bank.

Frank Savage, Equitable Capital's vice chairman, said the two offices will offer the full range of Equitable Capital's U.S. services in money management and corporate finance.

"In Tokyo, we have been doing business with a number of major institutional clients, and since that number is growing rapidly and we've had success, we needed to locate an office there to serve

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AT DEADLINE

Wunsch leaves Kidder

R. Steven Wunsch has left Kidder, Peabody & Co. to develop his controversial system for a single-price auction mechanism.

Mr. Wunsch, former vice president in Kidder's financial futures department, said he hopes to have the system — an electronic trading market where stocks are bought and sold through an open book at a fixed time of the day — ready in April.

Virginia official quits

The chairman of the $10.24 billion Virginia Supplemental Retirement System has resigned amid controversy surrounding the proposed merger of a company in which the fund owns a 19% stake.

Charles W. Walker, who previously said he had planned to resign from his post at the fund this year, also sits on the board of Richmond, Fredericksburg & Potomac Railroad Co., which CSX Corp. wants to acquire.

He said a conflict with Gov. L. Douglas Wilder over whether the merger makes sound investment sense hastened his departure.

Committee approves bill

The Senate Labor Committee approved legislation restoring older workers' ability to challenge reductions in their benefits on age discrimination grounds.

But the bill, S. 1511, was amended to permit certain early retirement subsidies and provide a limited offset of severance benefits with health benefits, meeting some of the objections of employer and labor groups.

Kentucky taps 6

The board for the $3.3 billion Kentucky Retirement Systems has authorized hiring six investment managers for about $2.2 billion and terminating a balanced and fixed-income manager.

The new managers, subject to contract negotiations, are: Investment Advisers, First Kentucky Co., Investment Counselors of Maryland, T. Rowe Price Associates, TCW Realty and Yarmouth Group.

Terminated were Capital Supervisors, which for a decade ran a balanced fund, and Munder Capital Management, which managed fixed income.

Group issues report

The U.S. Group of Thirty Steering Committee, a group of financial executives, repeated in a Feb. 28 report its call for the use of same-day funds for payment of corporate securities "as soon as practicable." The change is one of several sought to make global investing faster and more efficient.

Manager hired

The Prudential Bank & Trust Co., a unit of Prudential Financial Services Inc., hired Munder Capital Management to manage half of its $16 million employee benefit fixed-income fund.

New hurdles for reversions

Sen. Howard Metzenbaum's fight to restrict reversions is gaining support.

Tough rules proposed for surplus distributions

By Joel Chernoff

WASHINGTON — Plan sponsors would stop recouping surplus pension assets and might even freeze their defined benefit plans if a bill passed by a Senate panel last week becomes law, experts predict.

"They have solved the problem of overfunded pension plans. There simply won't be any," said Mark Ugoretz, executive director of the ERISA Industry Committee, a Washington-based lobbying group.

In an 11-5 vote, the Senate Labor and Human Resources Committee approved legislation that would expose employers to a whole new level of liability for trying to use surplus pension assets for purposes other than to fund retirement benefits.

The bill would make the decision to distribute surplus assets from a terminated pension plan a fiduciary one under the 1974 Employee Retirement Income Security Act. The bill also would subject any transfers of surplus assets to a retiree medical account to fiduciary rules.

"It's clearly going to slam the brakes on a lot" of asset reversions, said Frank McArdle, manager of Hewitt Associates' Washington office.

"Effectively, it forces an employer to freeze his plan for fear that some disaffected employee group will sue him," Mr. Ugoretz added. Even normal plan functions not involving a reversion or transfer — such as adding a cost-of-living adjustment for current retirees, merging plans, spinning off plans or funding decisions — might elicit a lawsuit from active employees, he warned.

The bill was proposed by Sens. Howard Metzenbaum, D-Ohio, and Nancy Kassebaum, R-Kan. It replaces S. 685, which would have required employers to share the surplus with retirees and provide replacement retirement plans.

Mr. Metzenbaum has been trying to restrict asset reversions for seven years.

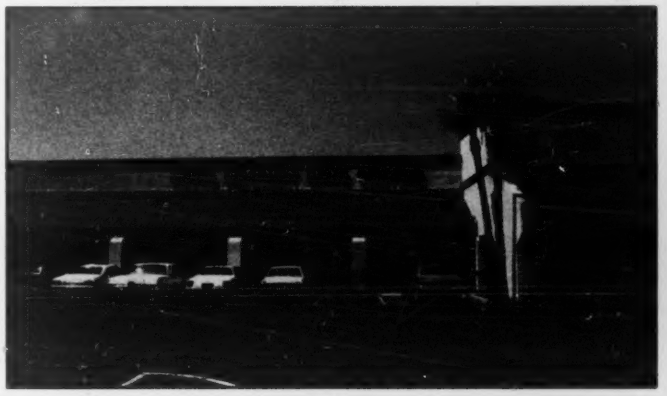
The recent troubles of Drexel Burnham Lambert Inc. and the junk-bond market have given greater momentum to these efforts. Specifically, concerns were raised by Ms. Kassebaum's constituents over an initial commitment — since canceled — by Wichita, Kan.-based Coleman Co. Inc. to purchase annuities from a

See **Assets** *on page 34*

Oregon sees gem in junk heap

State fund focuses on special plays

By Terry Williams



Revco junk bonds have caught the eye of the Oregon fund, which sees a pot of gold in securities of the distressed drugstore chain.

SALEM, Ore. — The Oregon Public Employes Retirement System is picking through the ruins of distressed companies to make a special situation play in the junk-bond market.

The retirement system re-entered the junk market Feb. 16 with its purchase from an unidentified bank of $20 million of junk bonds of bankrupt Revco D.S. Inc.

William Unvertzagt, investment officer-fixed income, said the $11.1 billion fund bought the bonds, with an 11.75% coupon, at 86, a discount. It expects to receive an annual return of 25%, he said.

Oregon fund officials want to buy the junk issues of distressed companies they believe will emerge healthy from bankruptcy, according to Mr. Unvertzagt.

"We don't want to play the junk market per se," he said. "We want special situations. It may not sound like much of a distinction but it's quite a large one."

The Oregon fund left the junk market in August 1988, when it sold about $200 million of industrial junk bonds. The difference between that play and the current one is the strategy.

Two years ago, Oregon allocated a percentage of its total assets to buy junk bonds, then chose from a diversified list of 35 to 40 companies, Mr. Unvertzagt said. "We did it (that way) before and made money and then got out," he said.

That approach is no longer adequate in today's volatile market, according to Mr. Unvertzagt. "Now you have to look for special situations."

"The approach we are taking right now is we will buy junk issues but it has to be an ongoing business that could show growth," he said.

Oregon is on the lookout for three to five situations like Revco, in which it can put $20 million to $50 million each, Mr. Unvertzagt said.

Fund officials have not set a limit on the percentage of total assets they will allocate to the junk bonds of distressed companies. "The limit is how many good situations we find," Mr. Unvertzagt said. "We don't think there are many."

Revco's junk bonds were attractive because the business was healthy and continued to operate while in bankruptcy, Mr. Unvertzagt said.

"The capital structure is what put them under," he said. (In June 1988, REVCO failed to make a $46 million semiannual payment on $703.5 million of publicly held bonds.) "The business itself was healthy."

Revco, based in Twinsburg, Ohio, is reorganizing under Chapter 11 of the Federal Bankruptcy Code. It operates a nationwide chain of about 1,800 drugstores, down from about 2,000 when the company filed for protection from its creditors July 28, 1988.

Revco was the first major company to declare bankruptcy after being taken private in a leveraged buy-out. The buy-out was put together by Salomon Brothers Inc.

The junk bonds Oregon now owns were part of a private placement and are collateralized by the drug stores, according to Mr. Unvertzagt.

"What we really liked was being a senior creditor of this company," he said. "We expect them to emerge from bankruptcy in no more than two years." ■

$20 bil. looking for work

By Leonard Hollie and Marlene Givant Star

A directory of LBO funds begins on page 17.

The failure of Forstmann Little & Co. to raise $3 billion for equity infusions in overleveraged companies still leaves more than $20 billion of institutional investors' capital available to fuel corporate restructuring and acquisition activity despite recent setbacks in the junk-bond market.

Corporate restructuring-related funds have an estimated $20 billion from pension funds and other institutions committed but uninvested. That figure does not include the leverage that capital represents, which would give dealmakers five to 10 times more money to put to work.

Even without the Forstmann-Little fund, which the firm scrapped last week after it was unable to raise a significant amount from former institutional partners and others, there are more than 100 funds asking institutions for another [illegible] billion-plus for leveraged

See LBOs on page [illegible]

NEWS DIGEST

The Securities and Exchange Commission decided shareholder resolutions opposing tobacco product manufacturing and advertising must be put to a vote. Page 6.

LTV Corp.'s motives involving its terminated pension plans were questioned by two justices as arguments opened in its case before the Supreme Court. Page 34.

SPECIAL REPORT: DIRECTORY OF LBO FUNDS

Leveraged buy-out professionals insist the deals aren't dead, despite recent events. *P&I* has put together a directory of some of the key LBO players. Page 17.

FINANCING

More than $20 billion from institutional investors will continue to fuel corporate restructurings. Page 1.

Benedetto, Gartland & Co., an investment bank focusing on second-tier issuers, did two deals totaling $1 billion in its first year. Page 8.

Public company ESOPs are on a borrowing binge and investors are gobbling up the debt. Page 28.

INTERNATIONAL

Deutsche Bank Capital Management (USA) has closed its office in New York. Page 10.

Japanese mergers and acquisitions are heating up, fueling speculation in the Tokyo stock market. Page 26.

The roller-coaster ride in the Japanese markets hasn't yielded buying opportunities for U.S. investors. Page 34.

REAL ESTATE

Philadelphia Municipal Pension Fund trustees are under fire for MIG Realty Advisers' dual role. Page 6.

Real estate investment bankers are among the best paid professionals in the industry. Page 8.

PSI Institutional Realty has convinced five pension fund investors the demand for miniwarehouses will continue to be strong. Page 20.

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Armstrong in 2-front war

Takeover fought with proxies, legislation

By Curtis Vosti
and Marcia Parker

LANCASTER, Pa. — Institutional investors will play a pivotal role in the outcome of the brutal proxy contest between Armstrong World Industries Inc. and Canada's Belzberg family, the company's second largest shareholder after its ESOP.

As soon as their proxy materials gain government approval, advisers to both sides will begin seriously courting the institutions, who own close to 60% of Armstrong. The contest will be decided at Armstrong's April 30 annual meeting.

Meanwhile, this hot battle for corporate control also is shaping up to be the prime test of shareholder rights in the form of a controversial bill pending before the Pennsylvania Legislature to give its already strong anti-takeover law even more teeth. The impetus for the bill is the Armstrong-Belzberg struggle.

Institutional investors across the country have joined forces against the bill they say would make it absurd, if not legally questionable, to invest in Pennsylvania companies.

Officials from the Pennsylvania State Employes' Retirement System, the California Public Employees' Retirement System and the Massachusetts Pensions Reserve Investment Management Board were among those testifying during two days of hearings before the Pennsylvania House Business and Commerce Committee.

"I think it's outrageous. It fundamentally attacks the rights of shareholders," said Paul Quirk, PRIM's executive director.

He said the Council of Institutional Investors' executive committee, of which he is a member, took the unprecedented step of voting unanimously to oppose the measure. Although anti-shareholder provisions have passed other states without council input, the committee decided to act on the Pennsylvania proposal in part because, "this is the worst of any that I've seen."

While some of the institutional investors could see the merit in making hostile takeovers harder, they complained the bill would allow an unacceptable realignment of shareholder rights.

The bill would allow corporate directors the right to consider in-

See **Turmoil** *on page 32*

Lockheed adds fund parachute

By Trudy Ring

CALABASAS, Calif. — Lockheed Corp., in a proxy battle with takeover artist Harold Simmons, has installed a "pension parachute" to make its overfunded pension plan less attractive to acquirers.

Lockheed officials contend the company's pension surplus is much smaller than it looks. According to its 1990 annual report, Lockheed's pension assets exceed its accumulated benefit obligation by $2.1 billion.

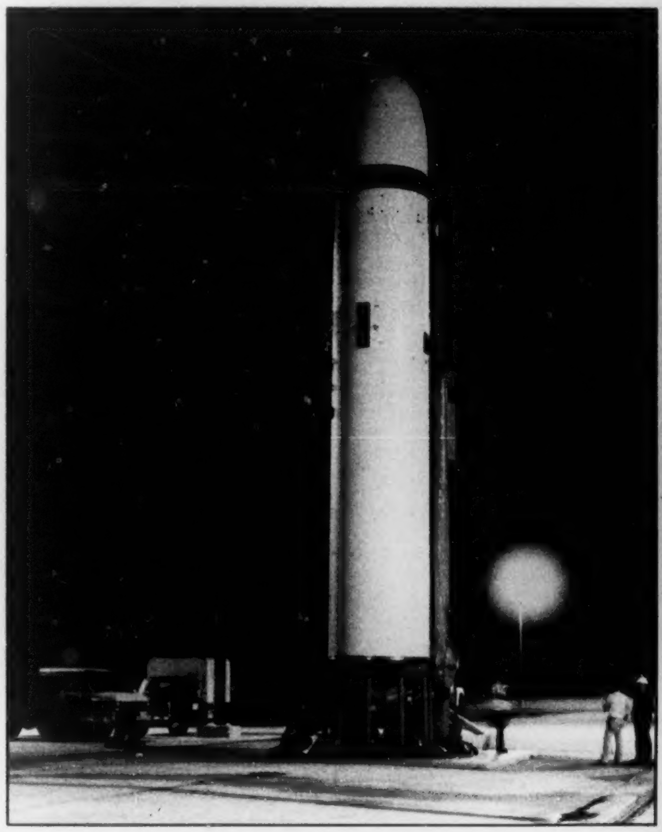
The report lists assets of $5.7 billion, an ABO of $3.6 billion and a projected benefit obligation of $4.2 billion as of Dec. 31.

A statement issued by Lockheed's investor relations department, however, says if existing plans were terminated, only about $100 million would be available.

Factors reducing the surplus would be the cost of buying annuities to cover benefits, federal and state taxes, and expected contractual claims of government customers.

Lockheed is a major defense

See **Lockheed** *on page 31*



Lockheed, a major defense and aerospace concern, is taking steps to make its pension surplus less appetizing to takeover artists.

FDIC cut-off irks 457 sponsors

By Fred Williams

State and local officials nationwide are angered by the FDIC's proposal to withdraw pass-through insurance coverage on 457 plan assets invested in savings and loan time deposits.

Government finance officials believe removal of the pass-through coverage will discourage participation in 457 plans, and thrift officials warn of a possible exodus of assets from the S&Ls if the coverage is removed. About 40% of 457 plan assets are deposited in S&Ls.

In the same report, the Federal Deposit Insurance Corp., as expected, reaffirmed the principal of pass-through insurance coverage for bank investment contracts. The pass-through issue has been at the center of an extended controversy between banks and insurance companies, which view the pass-through coverage of $100,000 per participant on BICs as unfair and posing unnecessary risk to the FDIC.

The study is one of three reports on deposit insurance required under provisions of the Financial Institutions Reform, Recovery and Enforcement Act of 1989. The other two studies, not expected until 1991, are being conducted by the Treasury Department and the General Accounting Office.

While the FDIC's stance on pass-through coverage for BICs was no real surprise, the removal of the pass-through coverage for assets held in savings and loan institutions by 457 plans has prompted state and local officials across the country to complain about what they see as unfair treatment.

The FDIC has taken the unusual step of calling a public hearing March 14 in Washington on the issue.

It is estimated about $4 billion of the approximately $10 billion in 457 plan assets are in time deposits in S&Ls. Thrift accounts had been covered by pass-through

See **Public** *on page 33*

FINANCING

Firm capitalizes on second tier concentration

Photo by Alice Garik

M. William Benedetto's firm did $1 billion in deals its first year.

■ An investment banking firm set up to work with companies just under the first tier of the 300 largest issuers completed two deals worth more than $1 billion during its first year.

Benedetto, Gartland & Co., New York, not only raises money for its own investment banking activities, but also for other investors. In 1989, Benedetto, Gartland was the U.S. fund raiser for British-based Clayton & Dubilier's $1.2 billion leveraged buyout fund.

It also recently completed financing for Pointplus in its effort to gain control of a U.K. printing technology company, Monotype. Pointplus is the investment arm of U.S.-based King Black & Associates. To complete the deal, Pointplus had to buy a 7.38% share of Monotype from Robert Maxwell. Mr. Maxwell is owner of the U.K.-based Mirror Group Newspapers who unsuccessfully bid for Monotype, which supplies the Mirror newspapers with printing technology services.

M. William Benedetto was formerly managing director of the corporate finance department at Bear, Stearns & Co. The firm's other founder, Arthur J. Gartland, formerly served as managing director with Kidder, Peabody & Co. They had worked together at Dean Witter Reynolds Inc.

INVESTING

Alpine a disciple of religious bonds

■ Alpine Capital Management Chairman John Dickerson, impressed with the quality and yield of bonds issued by Roman Catholic entities, has launched a mutual fund focusing on these instruments.

The Catholic Income Trust invests in bonds issued by Catholic dioceses and related institutions such as hospitals, nursing homes and universities. It also invests in corporate, municipal and government-agency bonds whose issuers meet social criteria in tune with Catholic doctrine.

Mr. Dickerson got the idea for the fund about two years ago when he looked over the prospectus for a Catholic institution's bond issue. He was impressed with the balance sheet and yield, he said: "For all practical purposes, I felt the bond was as good as a government bond."

Such bonds weren't widely available to the general public, however, as other Catholic institutions usually snapped them up for their investment portfolios. The mutual fund has drawn significant institutional interest, with a diocese and an insurance company among the investors. It has $3.2 million so far.

Alpine has a similar fund for Protestant entities' bonds, the Fellowship Income Trust, in registration with the Securities and Exchange Commission. Mr. Dickerson, a Presbyterian, emphasized setting up the funds was a business, not a religious, decision: "We discerned a market niche."

Ted Aronson smiles at the timing of his Drexel investment.

INVESTING

Recalling glory that was Drexel

■ Ted Aronson, principal of Philadelphia-based Aronson & Fogler, claims the best investment he ever made was in the stock of **Drexel Burnham Lambert Inc.**, which filed Feb. 13 for protection from its creditors under Chapter 11 of the Federal Bankruptcy Code.

But before you check on his performance, you should know he owned the stock while he was an employee of the now-beleaguered firm from 1974 to 1981.

"My investment in Drexel, which thank God was automatically cashed out when I left . . . was easily the best investment I ever made," Mr. Aronson said, adding he used the proceeds "to go on my entrepreneurial way."

Mr. Aronson estimated his stock increased in value about 500% while he owned it. "And that was before they really took off" during the 1980s.

REAL ESTATE

Investment bankers draw top dollar in realty industry

■ Heads of real estate departments at major investment banks earned the highest salaries in the real estate industry in 1989 and should continue to be the highest paid in the 1990s, a survey shows.

The survey, conducted by Ferguson Partners Ltd., a Chicago business advisory service firm, includes 49 salary categories from 500 companies.

The highest paid real estate executives made between $600,000 and $1.2 million, a 30% increase from 1988, according to the report. Heads of real estate departments at major investment banks were at the top of the list because of their financial expertise. And William J. Ferguson, managing partner, said "real estate executives with financial backgrounds and expertise are expected to become even more important in the years ahead."

Other top-paying job categories are:

- Acquisition heads of major pension advisory firms, $500,000.
- Chief executive officers of full service real estate firms with no equity potential, $437,500.
- Chief executive officers of savings and loans with assets of $5.1 billion or more, $437,500.
- Chief executive officers of residential mortgage banks with assets of $5.1 billion or more, $393,750 to $437,500.
- Vice presidents of mortgage lending for insurance companies with real estate portfolios exceeding $9 billion, $300,000 to $400,000.
- Chief executive officers of major real estate consulting firms, $300,000 to $400,000.
- Marketing directors of real estate money management firms, $200,000 with bonuses as a percentage of funds raised.

FUTURES & OPTIONS

Index options better performers

Peter Thayer will suggest indexing to new option clients.

■ Option writers are better off using indexed instruments than options on individual stocks, according to Peter Thayer, president of Cincinnati-based Gateway Investment Advisers.

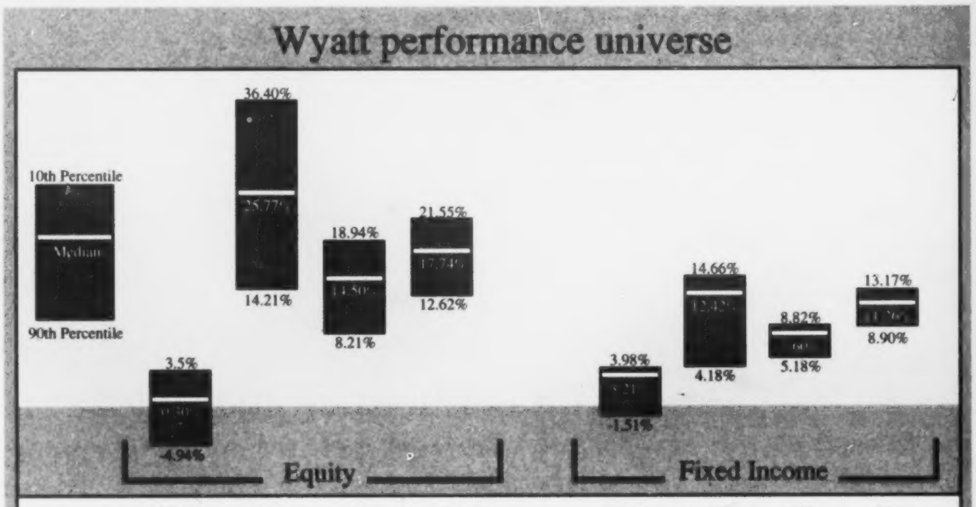
A Gateway strategy that tracks the Standard & Poor's 100 Stock Index and overlays it with S&P 100 options returned 19.5% in 1989.

During the same period, the firm's accounts overwritten with individual stock options returned 9% on average, Mr. Thayer said.

He blames the poorer performance of the latter accounts on internal dispersion within the universe of stocks.

"Half your stocks are going way up, half your stocks are going way down," he said. The ones that go way up are called away as their prices surpass the option strike price.

For the future, Mr. Thayer plans to suggest to clients going into option writing strategies that they index at least a portion of their holdings.



Wyatt performance universe

	4th Quarter	1 Year	3 Years	5 Years		4th Quarter	1 Year	3 Years	5 Years
Value Mgrs.	-0.85%	23.59%	15.71%	18.62%	Int. Antic. Mgrs	3.48%	13.09%	7.94%	12.20%
Aggr Gr. Mgrs.	-1.51%	33.08%	16.85%	18.74%	0-5 Yr Mat. Mgrs.	2.95%	11.32%	8.01%	10.29%
S & P 500	2.02%	31.43%	17.21%	20.16%	SLH Aggreg.	3.72%	14.53%	8.28%	12.31%
					T-Bills	1.71%	7.80%	6.37%	6.44%

Source: Wyatt Asset Services, Inc.

Graphic by John Smither

MONEY MANAGERS

Eagle decides to clip own wings

■ Eagle Asset Management, which doubled its assets under management during the past year, has decided to shut its doors to new business prospects until January 1991.

The decision came suddenly. "We were sitting there in the third week in January and literally involved in more searches than before," said Lincoln Kinnicutt, senior vice president.

The firm "was afraid it would strain our resources" if any additional new business were pursued, Mr. Kinnicutt explained.

The St. Petersburg, Fla., equity manager has ballooned to $3.5 billion from $1.7 billion a year ago. Tax-exempt assets have shot up to about $2.6 billion from $1.2 billion during that period, including accounts from Dennison Manufacturing Co., the Oklahoma Teachers' Retirement System, and the City of Tallahassee (Fla.) Retirement System.

No wonder Eagle has to turn clients away. It returned 34.7% in 1989, and a compound annual 24.4% and 23.3% for the five- and 10-year periods. The Standard & Poor's 500 returned 31.6%, 20.3% and 17.6%, respectively.

PEOPLE

Arvin Industries names new CFO

■ Richard Smith is the new chief financial officer and vice president-finance at Arvin Industries.

Mr. Smith had been treasurer of the Columbus, Ind., company since November when he joined Arvin. The company makes various products, including auto parts and accessories, and is involved in metals fabrication.

Previously, he was vice president and treasurer of The May Department Stores Co. and vice president and controller of its Volume Shoe Corp. subsidiary.

Justices hear LTV arguments

By Jerry Geisel

WASHINGTON — The chief justice of the United States asked last week whether a new pension program by The LTV Corp. really was an effort to shift a huge pension debt to a federal agency.

During oral arguments Feb. 27 in the multibillion-dollar pension case, Chief Justice William Rehnquist questioned if the LTV program was a way to "fob off" most of the plans' $2 billion in unfunded pension liabilities onto the Pension Benefit Guaranty Corp.

At the same time, Associate Justice Antonin Scalia appeared skeptical of whether the PBGC should have to pick up LTV's pension liabilities while LTV operates a new pension program.

"It would seem very strange indeed for the federal government to allow your company to compete with others . . . and have taxpayers fund it," Justice Scalia said.

LTV, a Dallas-based aerospace and steel manufacturer, has been operating under Chapter 11 of the Federal Bankruptcy Code for more than three years.

The justices' remarks came as the Supreme Court reviews a case with major implications for the PBGC and for employers with defined benefit pension plans that support the PBGC through mandatory insurance premiums.

At issue is whether the PBGC has the authority to restore an already terminated pension plan after a company sets up new "follow-on" pension plans.

In January 1987, the PBGC terminated three LTV pension plans, which have more than $2 billion in unfunded liabilities and about 100,000 participants, after LTV told the agency it no longer could afford to fund the plans.

In September 1987, the PBGC — in an unprecedented action — told LTV it was returning the plans to the company. The PBGC moved to restore the plans after LTV, as part of a collective bargaining agreement with the United Steelworkers of America, established follow-on plans to provide to union members certain non-PBGC guaranteed benefits that were lost when the old plans were terminated.

The PBGC charged LTV was abusing the insurance program. The agency said the new plans were an illegal continuation of the terminated plans, except the PBGC, rather than LTV, would be paying the bulk of benefits to vested workers and retirees.

But federal courts have ruled against the PBGC. In 1988, a U.S. District Court judge ruled said the PBGC had acted in an "arbitrary and capricious manner" in returning the plans to LTV. The decision was affirmed last year by the 2nd U.S. Circuit Court of Appeals.

The stakes are enormous. PBGC officials have said if LTV prevails, other companies will terminate underfunded pension plans, shift the liabilities to the PBGC and establish new, low-cost plans.

Bankruptcy attorneys, however, say 1987 pension reforms have made it much tougher to dump pension liabilities on the agency.

In arguments before the Supreme Court, PBGC General Counsel Carol Flowe said the Employee Retirement Income Security Act of 1974 gives the agency broad authority to restore a terminated pension plan.

But New York attorney Lewis Kaden of Davis Polk & Wardwell, who argued on behalf of LTV, said there is nothing in ERISA that bars an employer from establishing new pension plans after it terminates a plan, and the agency's actions violated the Administrative Procedures Act.

Mr. Kaden said if the PBGC restored LTV's plans, a kind of pension "pingpong" would result. He noted that because one of the plans is essentially broke, the PBGC would, under law, be required to reterminate the plan.

Ms. Flowe disagreed, saying that plan has sufficient assets to pay benefits for at least several years. ■

The A.M. Best Co. rating of **Aetna Life** was misprinted in a chart in the Feb. 19 issue. The correct rating is A+.

10 largest group annuity writers

Rating	Writer	Amount $ bils.	% bonds	% long-term investment-grade holdings
A+	Metropolitan	8.2	53	96
A+	Aetna Life	5.6	30	93
A+	Equitable Life	3.9	27	87
A+	New York Life	3.2	56	97
A+	John Hancock	2.9	35	90
A+	Principal Mutual Life	2.8	29	88
A+	Prudential	2.5	44	87
A+	Mutual Life of New York	1.9	27	88
A	Provident Nat'l Life	1.6	56	98
A+	Hartford Life	1.4	65	100

Table based on year-end 1988 data, which is the latest available. A.M. Best's top rating is A+.
Source: A.M. Best Co. Inc., Oldwick, N.J.

More disorder seen in Japanese markets

By Curtis Vosti

During the roller-coaster ride in the Japanese markets the last weeks of February, U.S. institutional investors for the most part nervously eyed the situation but did not identify buying opportunities.

Several managers said they expect the volatility to continue at least in the near term. Other factors, such as increasing yields in fixed income and the end of the Japanese fiscal year March 31, also would conspire to make the market, at least in the short term, "not a safe place," as one analyst at Baring International Investments Ltd., London, said.

On Feb. 26, the Nikkei index dropped to 33,321 — an additional 4.5% drop in a market that had dropped 6.9% the week before — but climbed back 1,200 points the next two days before dropping 762 points March 1.

The feeling the Japanese market is ripe for correction — or at the least, overvalued — is widespread among U.S. institutional investors. According to InterSec Research Corp., Stamford, Conn., the median weighting of U.S. overseas portfolios in Japan stood at 33.8% at the end of 1989, about half of the weighting in the commonly used international benchmarks against which managers' performances are measured.

What that means is managers were betting Japanese market performance would drag down the benchmarks. By underweighting Japan, managers had an opportunity to outperform the index by investing in other markets.

Because of its economic outlook of higher interest rates, inflation pressures and large money supply growth, GE Investments had lowered its weighting in Japan to the "high 20s" from about 40% at the start of the year, according to John Reinsberg, senior vice president. "We're going to sit and wait for opportunities," Mr. Reinsberg said Feb. 28, after the two-day 1,200-point rally.

He said the firm expects the Japanese market to continue to be volatile in the near term. However, overall the firm has a positive economic outlook for Japan. "It's just going to be much more selective than in the past."

Others agreed.

"We will not invest in Japan until it (the Nikkei average) comes down another 20%," said Forrest Berkley, portfolio manager for Grantham, Mayo, Van Otterloo & Co. International, Boston, which has been out of the Japanese market since June 1988.

"We think as a market, Japan is still dramatically overvalued relative to the risk and return needs of our U.S. clients," said I.P. "Kip" Knelman, executive vice president and director for Hill Samuel Investment Advisers, Minneapolis.

Hill Samuel is weighted about 18% in Japan, and Mr. Knelman said the market would need to drop to about 24,000 before the firm would consider the market ripe for buying.

In a point echoed by many firms with sizable, although underweighted Japanese portfolios, Mr. Knelman said there is value to be found in selected stocks, although "right now there's nothing we're actively purchasing."

Peter Hartley, chief investment officer at Baring, agreed there are selected stocks in which to find value, although "most foreigners can't understand the basis of valuing the Japanese shares."

"I can't see us becoming overweight compared with the index," said Mr. Hartley. The firm is about 38% weighted in Japan and says using the firm's value-driven approach, the market would have to go "significantly lower" before it would consider it a buying opportunity. ■

Assets

Continued from page 1

unit of First Executive Corp., Los Angeles. First Executive took a $515 million write-down on its earnings last quarter because of its heavy junk-bond holdings.

In addition, the element of stopping corporate raiders — New York financier Ron Perelman acquired Coleman a year ago — and desires to protect retirement income needs of older workers have made the legislation into "a sexier issue than it has (been) in the past," explained Mr. McArdle.

The bill outlines factors the fiduciary would have to consider in distributing surplus assets when a plan is terminated.

Those criteria include whether an adequate portion of the surplus assets was retained in a comparable replacement plan, whether cost-of-living adjustments were provided to retirees and whether the employer was financially stable enough to continue providing benefits.

But the bill fails to provide specifics, instead requiring employers to hire an independent adviser to evaluate the transaction.

Benefits experts question whether almost any transaction might not violate ERISA's requirement that fiduciaries act in the "exclusive benefit" of plan participants and beneficiaries.

In addition, the bill would make the plan administrator personally liable for the amount of the reversion plus interest and other remedies, and would give participants the right to challenge the administrator's decision in court.

Similarly, the bill lays out fiduciary considerations for permitting a transfer of surplus assets to retiree-health accounts but provides few specifics.

In authorizing a transfer, the legislation would require a fiduciary to consider whether: "adequate vesting and other protections" are provided to pension plan participants; retiree health benefits would not be eliminated or reduced; and the pension plan retained sufficient assets to meet future benefit liabilities and includes a funding cushion.

Nowhere, for example, does the bill define what qualifies as an adequate funding cushion or whether retiree health benefits must be retained at a fixed-dollar level or as a proportion of benefits. The latter could expose employers to an open-ended commitment to providing health benefits regardless of medical inflation.

The provisions affecting terminations would apply to those plans with assets not distributed by Feb. 28. No effective date was included for the retiree-health transfers, possibly because such transfers are not permitted.

(Separately, Sen. Bob Packwood, R-Ore., and Rep. Rod Chandler, R-Wash., proposed legislation last week that would permit employers to transfer pension assets exceeding 150% of current liabilities to pay for retiree-health costs. The bills also would provide tax deductions for employers who pre-fund up to $1,500 a year for each of retiree-health care and long-term care.)

The Metzenbaum-Kassebaum bill also says the purchase of annuities is a fiduciary decision. It expands retroactively the definition of a "qualifying employer security" to include an interest in a publicly traded partnership.

Experts question whether the bill will be passed in its current form. In addition, some expect the Senate Finance Committee to assert jurisdiction — particularly on the retiree-health transfer — even though the measure was drafted to avoid the tax-writing panels.

Some also speculate the bill is an effort to force employers to come to the bargaining table. Alternatives range from an outright ban on asset reversions to a moratorium on reversions, as recently proposed by Ms. Kassebaum.

In addition, Sen. Jim Jeffords, R-Vt. said he will offer a substitute measure on the Senate floor that would permit employers to use surplus assets to pay for other employee benefits, research and development and plant expansion, among other things. ■

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AT DEADLINE

NYC divestiture action likely

The board of the $17.7 billion New York City Employees' Retirement System was expected to vote March 16 to divest the last of its holdings in companies that do business in South Africa.

Since 1984, the fund has divested $262 million. It still has about $600 million of stock in foreign and U.S. companies, their subsidiaries or affiliates doing business or operating in South Africa.

Salomon buys Shearson unit

Salomon Brothers reached an agreement this week to purchase Lehman Management Corp., a subsidiary of Shearson Lehman Hutton Inc., New York, for $28 million. The transaction must be approved by Lehman Management's shareholders.

PBGC's health improving

The PBGC's deficit shrank to $1 billion in the fiscal year ended Sept. 30, down from $1.5 billion the year before. Assets increased 26% to $3.2 billion, while total liabilities edged up 5% to $4.2 billion. An investment return of 19.6%, or $440 million, accounted for a large part of the improvement.

The results exclude the potential absorption of three LTV pension plans, which are underfunded by about $2 billion.

GTE hires Acorn for options

The $10 billion GTE Corp. pension fund has switched options overwriting managers, moving to Acorn Asset Management from Webster Capital Management.

The change occurred because Webster's overwriting personnel went to Acorn and Webster did not have the capability to continue the service. Webster officials said the firm intends to add personnel to maintain and enhance its options overwriting capability.

State Street alum returns

A. Edward Allinson, president and chief executive officer of Mitchell Hutchins Asset Management, has left the firm to rejoin State Street Bank & Trust Co. after a 13-year absence.

In his new position, he will be executive vice president responsible for the mutual fund servicing area and chairman and CEO of Boston Financial Data Service, a joint venture between State Street and DST Inc.

His departure follows a restructuring of the firm in December.

Insurers' status safe

Insurance companies with sizable junk bond holdings would remain solvent even in a scenario of widespread defaults of portfolio companies, a review by Standard & Poor's shows.

If subjected to default rates of 10% on high-yield issues, assuming

Photo by Barry Kaufman

Nell Minow of Institutional Shareholder Services Inc. believes accountability is mandatory for both investors and management.

Investor muscle

Pressure on boards to intensify

By Marcia Parker

Institutional investors will press boards of directors harder than ever to shoulder more of the burden of making companies more accountable, of communicating with shareholders and of mediating conflicts between management and stockholders.

This was the consensus of a *Pensions & Investments* roundtable discussion of whether institutional investors have gone too far in their campaign for improved corporate governance.

The panelists were Catherine Dixon, a staff member with the Securities and Exchange Commission's Division of Corporate Finance, which is studying an overhaul of the proxy system; Nell Minow of Institutional Shareholder Services Inc., a Washington consulting firm; Augustus Oliver, a general partner of Coniston Partners; Edward Regan, sole trustee of the New York State & Local Retirement Systems; and John Wilcox, managing director, Georgeson & Co., New York.

The panelists agreed there is a out of the takeover era partly because corporate executives link institutional shareholder activism with change of control and anti-management attitudes.

"What's underlying all of this is a fundamental distrust. The large institutional stockholders are saying managements are not to be trusted, and the managements are saying the shareholders are not to be trusted, because in each case, they don't have the best interests of the business enterprise at heart," Mr. Oliver said. "I think both sides are wrong. This fundamental distrust is imposing a tremendous cost on all of us in the whole system."

An edited transcript of the roundtable — page 17

The participants agreed institutions have accumulated a great deal of influence through the years, and that they still are learning to wield that power effectively.

But they said activist institutional investors have not used their influence effectively in spite

NYNEX does 1st shelf issue

ESOP-depleted treasury repaid

By Marlene Givant Star

NEW YORK — NYNEX Corp. plans to issue $500 million in notes to replenish treasury stock used to create an ESOP at a time when its share price is down and few corporations are tapping the debt markets.

Institutional investors are gobbling up debt related to employee stock ownership plans because there has been little other corporate debt so far this year. ESOP notes usually are high quality and issued by companies that otherwise might not come to market.

NYNEX is filing a shelf registration for the issue. "This is the first NYNEX shelf ever and probably will be the only one ever," said Jim Jordan, investment director-financial planning.

Proceeds of the telecommunications company's $500 million issue will be used strictly to finance the repurchase of common stock in the open market, Mr. Jordan said.

The shares will replenish treasury balances that were depleted upon formation of a leveraged ESOP earlier this year. There is a fair degree of regulatory scrutiny regarding leverage at the parent company level although a number of NYNEX's subsidiaries may come to market this year.

NYNEX's principal assets are New York Telephone Co., which represents about 65% of total assets, and New England Telephone and Telegraph Co. The two subsidiaries accounted for 83% of 1989 revenue. NYNEX's publishing, mobile communications, financial and real estate services subsidiaries provided 9% of revenue. The remaining 8% came from NYNEX's other businesses.

NYNEX was dealt a major blow March 8 when the New York Public Service Commission rejected a proposed settlement that would have given the company a $440 million rate increase in 1991. NYNEX shares fell $2.75 to $80.50 on the news.

NYNEX last week returned with a $965 million rate hike request and will have to go through a long hearing in which its cost structure and expenses will be scrutinized. Rejection of the earlier request also keeps alive an investigation into possible overcharges by NYNEX's purchasing arm.

A decision in the $965 million request probably won't be made until mid-December. Until a new rate structure is determined, NYNEX will have to grapple with uncertainty about its cash flow stream.

NYNEX, taking advantage of the drop in its share price, was in the market the first week in March repurchasing shares using internally generated funds. Even with the drop, the stock was still pricier than the 79⅞ level at which it closed when the 5.625 million-share ESOP was formed on Feb. 15.

NYNEX wanted to come to market with the ESOP notes issue soon after the Feb. 15 board resolution to adopt a leveraged ESOP,

See **NYNEX notes** *on page 36*

Virginia quandary

Fund holds stock but state gets profits

By Hillary Durgin

RICHMOND, Va. — For the past seven years, the state of Virginia has skimmed nearly $90 million from a railroad stock owned by the Virginia Supplemental Retirement System, but controlled by the state.

The proposed merger of Richmond, Fredericksburg & Potomac Railroad Co. into CSX Corp. has focused attention on a series of stock transfers involving the pension fund's 20% stake in RF&P. Both railroad companies are based in Richmond.

Whether the state or the retirement system pockets the proceeds from the proposed merger — if the pension system the book value of the stock, with any amount above that going to the state. On April 18, the governor and General Assembly will meet to hammer out details of the legislation and the disbursal could change.

In a deal valued at $385 million, CSX is offering $34.50 a share in cash or CSX stock for the 64% of RF&P it does not control.

Virginia Gov. L. Douglas Wilder and some shareholders and analysts believe real estate owned by RF&P may be undervalued, making the tender price too low.

But others, including Charles B. Walker, who stepped down as chairman of the Virginia retirement system after a confrontation

NEWS DIGEST

ServiceMaster L.P. will try for the third time to get congressional approval for its profit-sharing plan to invest in employer securities. Page 39.

SPECIAL REPORT: CORPORATE GOVERNANCE

***P&I* invited 5 panelists** to take part in a lively roundtable discussion of the changes in corporate governance and the relationship between institutional shareholders and corporate boards of directors. Page 17.

FINANCING

NYNEX Corp. plans a $500 million note issue, the proceeds from which will be used to replenish treasury stock used to set up the company's leveraged ESOP. Page 1.

Moody's Investors Service expects a modest 11% increase in worldwide structured finance issues this year, with major activity in continental Europe. Page 32.

INTERNATIONAL

Alliance Capital Management moved quickly to invest in Eastern Europe, placing $500,000 in three Hungarian stocks for one of its mutual funds. Page 6.

The British Rail pension fund is reaping significant gains as it sells artworks from its more than 2,300-piece collection. Page 26.

West Germany's liberalized investment rules are providing a boon to both foreign and domestic investors as well as service providers. Page 39.

REAL ESTATE

TIAA-CREF is suing two New York City agencies after they granted landmark status to a restaurant — and its fixtures — in the Seagram Building, which is owned by the pension fund. Page 4.

Property performance lagged the returns from U.S. equities, bonds and Treasury bills during the fourth quarter of 1989. Page 8.

Savings and loan bankruptcies and falling junk bond prices mean good chances for property buys. Page 10.

Real estate return measures might just be right, contrary to what the conventional wisdom holds. In Portfolio Management, Page 30.

Lehndorff & Babson Real Estate Counsel invested in two office buildings for the CORE Group Trust because of a scarcity of suitable retail properties. Page 32.

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Direct deposit dilemma

Plans, banks in battle over benefit payment liability

By Fred Williams

A cold war has developed between some pension plans and the banking community over which side is responsible for unauthorized electronic benefit payments after the beneficiary has died.

As direct-deposit benefit payments gain in popularity, pension funds are starting to require banks to sign agreements making the receiving bank responsible for any payments made after a beneficiary dies. In at least one case, a bank's refusal to sign the liability agreement resulted in a loss of business.

National Westminster Bank, New York, has lost "hundreds of customers" because of its refusal to sign the liability agreement, said Patricia A. Cohen, executive director of Florida Payment Systems Inc., Orlando, the Florida automated clearinghouse.

Bob Braun, an attorney at Nat West, said when some plan sponsors began requiring the bank to sign liability agreements before receiving electronic pension payments, "my bank picked up on it and revised the forms to say the amount (of liability) would be limited to the amount on deposit in the account when the claim was made."

"A major (pension plan) found out we were making the changes and said they would tell all their participants they wouldn't make the payment if our language was there. Our management decided the risk is unlimited and not a risk we were willing to take."

In general, bank officials say they should not be held responsible for the payments because they have no way of knowing if their customers are alive. Plan executives claim banks are in the best position to learn of the death of a retiree, and say the agreements are part of the sponsors' fiduciary responsibility to protect plan assets. They also say they first attempt to collect overpayments

See **Direct deposit** *on page 34*

Posthorn cuts 21 employees

K. Van Horn

By Margaret Price

LONDON — Posthorn Global Asset Management Ltd., which manages approximately $700 million in U.S. tax-exempt assets, has dropped its active thematic international equity approach and terminated its chairman, Karl Van Horn, and 20 other employees.

The firm managed approximately $200 million for U.S. tax-exempt investors using the thematic approach. It will offer an active disciplined value-oriented equity approach to U.S. tax-exempt clients, and will continue managing equities for mutual funds.

The cutbacks, which include closing an office in Belgium, came amid sweeping cost reductions by Posthorn's parent, Shearson Lehman Hutton Inc., New York. Shearson is expected to trim 2,000 jobs worldwide to save $400 million annually. Shearson's business is being scrutinized following a decision by its parent, American Express Co., to buy Shearson's outstanding publicly held shares.

U.S. pension fund clients using the thematic equities approach include American Telephone & Telegraph Co., Pacific Gas &

See **Posthorn** *on page 38*

USX spinoff backed

By Marlene Givant Star and Leonard J. Hollie

A large number of institutional investors believe spinning off USX Corp.'s steel business is a good way to increase the market value of the oil and steel conglomerate, but many are frustrated their decision on Carl Icahn's proposal will be non-binding on management.

While institutions always have had the power to vote their proxies on strategic decisions management is required to put on the ballot — such as a change of control or sale of assets — the USX case raises the question of whether a prominent shareholder should have the right to put major strategic decisions on management's agenda.

Mr. Icahn, USX's largest shareholder owning 13.26% of the company, has proposed at least 80% of USX's steel business be spun off. Shareholders will vote on that proposal at the May 7 annual meeting.

"As a shareholder, we want to maximize the returns for our beneficiaries, and do whatever it takes," said Jose Arau, principal investment officer for the California Public Employees' Retirement System, Sacramento, which owns 1.7 million shares of USX. He added he doesn't think shareholders would gain inordinate power to influence the business strategies of companies if Mr. Icahn's proposal passes.

Management grudgingly agreed to allow the vote. Although the result will be non-binding, institutions believe overwhelming support for the proposal would be tantamount to a mandate for change.

Making sweeping business strategy decisions of this nature is an area of corporate governance into which shareholders rarely have ventured. Not surprisingly, many institutional investors did not want to speak on the record about how they were likely to vote.

Peg O'Hara, director of the corporate governance service of the Investor Responsibility Research Center, Washington, said spinning off one's core business "is certainly rare when proposed by a shareholder and when proposed by one as big as Mr. Icahn, but it's not unheard of."

"This is unusual because (USX, formerly) U.S. Steel, is one of the biggest, oldest and best-known companies in America. The Icahn proposal gets more publicity (than most) but it is not an uncommon thing, particularly in a company that is having trouble, to do" a spinoff, Ms. O'Hara said.

Last year, for example, the United Mine Workers of America sponsored a shareholder resolution at Pittston Co., Greenwich, Conn., asking that a committee of the board be created to study divestiture of several of the company's four lines of businesses. Shareholders rejected the pro-

See **USX spinoff** *on page 35*

D. Phillips

Phillips quits at Ameritech

Donald W. Phillips, chief investment officer with the $10.5 billion Ameritech pension fund, will leave his post at the end of the month.

Mr. Phillips is joining Equity Financial and Management Co., Chicago, as executive vice president. That company is headed by real estate turnaround specialist Sam Zell.

A spokesman for Chicago-based Ameritech said Mr. Phillips' successor has not yet been named.

Funds exploring stock short sales

$950 million put into strategy

By Trudy Ring

Tax-exempt investors have pumped about $950 million into strategies using short selling of stocks during the past year.

Most of the interest in this hot new investment approach for institutional investors centers on investment styles that buy some stocks and short others, resulting in a market-neutral position, while a smaller amount of assets has gone to pure short-selling strategies.

Among the players:

- The $2 billion Rockefeller Foundation, New York, has put $50 million into a neutral fund run by Rosenberg Institutional Equity Management, Orinda, Calif. The foundation made the move less than a year ago, said Jack Meyer, treasurer and chief investment officer.
- The $11 billion Bell Atlantic Corp. pension fund, Philadelphia, has a small amount of money in a multimanager fund in which a few players are short sellers, said Edward P. Rennie, executive director-trust investments. He declined to name the fund or say how much Bell Atlantic has invested there. He said he'd like to see the strategy mature before putting more money into it.
- The Unisys Corp. pension fund, Blue Bell, Pa., and the Virginia Supplemental Retirement System, Richmond, reportedly are using short selling, but neither has confirmed this.

Officials at other pension funds, including Owens-Illinois Inc., Toledo, Ohio; Allied-Signal Inc., Morristown, N.J.; and Blue Cross and Blue Shield Association, Chicago, are taking a look at short selling.

Several money managers began marketing short-selling strategies within the past year.

Rosenberg Institutional has $600 million, almost all tax exempt, in its market-neutral strategy, which it has marketed since February 1989, said Marlis Fritz, partner.

J.P. Morgan Investment Management Inc., New York, has drawn commitments of $150 million from pension funds and foundations for a strategy of buying undervalued and shorting overvalued stocks within market sectors.

Frank Russell Trust Co.'s Private Partnerships Fund, which uses short selling and other nontraditional approaches, has more than doubled in the past 12 months to nearly $100 million in assets, all from pension funds. A similar fund for other investors has drawn $20 million.

Martingale Asset Management, Boston, has attracted about $50 million since the first of the year from two clients, one pension fund and one taxable investor, also for a strategy that buys undervalued and shorts overvalued stocks. The pension fund represents the bulk of the money.

Mellon Equity Associates, Pittsburgh, has drawn one $50 million pension fund account for its strategy that buys and shorts stocks based on differences in valuation. It began marketing the strategy Aug. 1.

Stovall/21st Advisers Inc., New York, also a firm that combines stock purchases and short sales, is gearing up for a major marketing push. It runs $50 million, including one $5 million account for a pension fund.

Overall, tax-exempt funds appear to have substantial interest in short selling, while impediments remain.

Ronald C. Boller, corporate vice president and director-benefit finance at Owens-Illinois, has been looking at short selling for about a year. "I'm still just as eager to do it as I was a year ago," he said. "We absolutely want to, but it's a legal thicket."

See **Short selling** *on page 35*

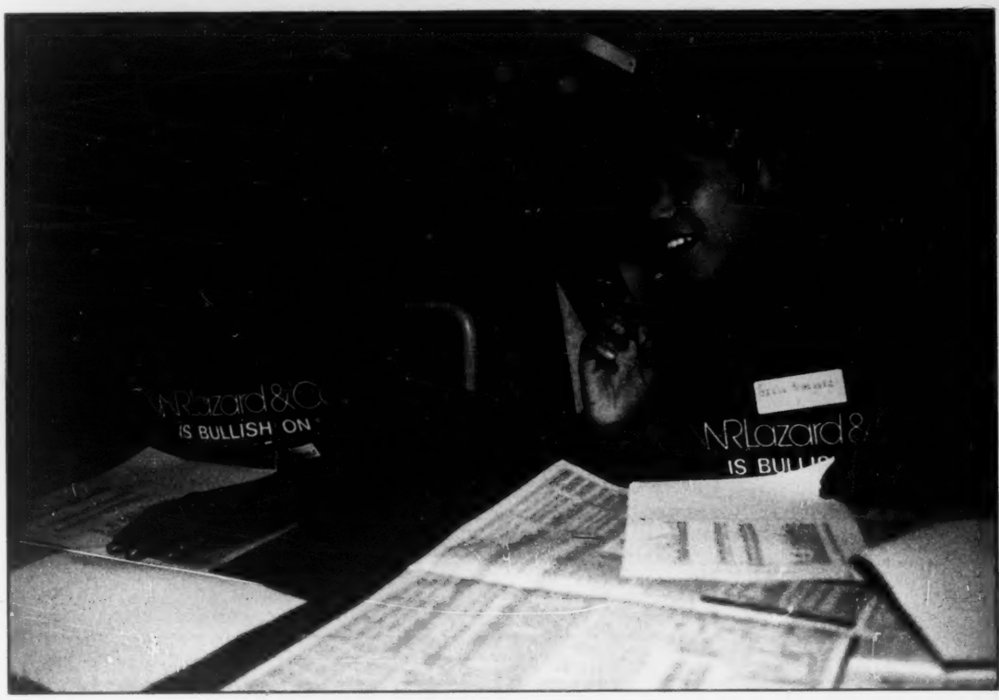


Photo by Alice Garik

New York public school students Tremayne Saunders, left, and Guiller Rodriguez scrutinize returns of their chosen stocks during a Wall Street field trip at WR Lazard & Co.

Kids get taste of Wall St.

WR Lazard tries to spark minds of students

By Terry Williams

NEW YORK — Thirteen-year-old Tremayne Saunders was ecstatic as he pored over his $107,000 investment portfolio. His 200-odd shares of Capital Cities/ABC Inc. had a market value of $517.75 per share, the highest of any of his eighth-grade classmates.

He was not shy about pointing this out. Shouting over the din created by 60 teen-agers in a conference room at WR Lazard & Co., he said, "Mine is worth $517."

But Tremayne's joy was short-lived; he soon learned he was looking at figures from Feb. 15, and this was Feb. 23.

The light in the youngster's eyes dimmed when told he had, in fact, lost money. Cap Cities had declined to $498 per share as of Feb. 22.

"I thought the price would increase," said Tremayne, his enthusiasm rushing out of him like air released from a pair of Reebok pump basketball shoes.

As a matter of fact, he would have been better off buying Reebok International Ltd. like his classmate Guiller Rodriguez, 14. Guiller, the recipient of Tremayne's taunts about anemic market price, saw his stock rise from $16.62 Feb. 15, the date of purchase, to $17.12 Feb. 22.

When advised of this, Guiller pumped up and said: "I like wearing Reeboks. They're comfortable and they're popular too.

"I was planning on buying the Pumps."

If the gain Guiller realized on his stock were in real dollars, he could have bought a pair of the $170 sneaker for every day of the week.

As it turned out, the portfolios and the $100,000 were part of an investment seminar by WR Lazard, a minority-owned investment management firm. Called "A Day on Wall Street," the firm played host to 60 inner-city children from Public School 123 in Queens and Intermediate School 195 in Manhattan.

The day's activities included a discussion of the children's portfolios, speeches about investment careers and a visit to the New

See **Students** *on page 38*

TAA returns in 1989

Standard & Poor's 500 Stock Index	**31.6%**
QuantiLogic Asset	29.2
Matrix Capital (global)	25.9
Bankers Trust (actively managed components)	25.6
M.D. Sass Investors (aggressive)	24.9
Bankers Trust (indexed components)	24.8
Static mix of 60% stocks, 40% bonds	**24.6**
Mellon Capital	24.4
Matrix Capital (domestic)	23.5
J.P. Morgan Investment	23.1
R.M. Leary	22.8
Avatar Associates	22.5
Callan Associates (median manager)	21.9
Prudential Diversified	21.8
M.D. Sass (moderate)	21.7
PanAgora Asset (equity orientation)	21.3
DeMarche Associates (median manager)	19.8
Chancellor Capital (two-way)	19.4
Chancellor Capital (three-way)	18.2
M.D. Sass (conservative)	18.0
PanAgora Asset (balanced orientation)	17.5
First Quadrant	15.8
J.H. Ayres	14.3
TSA Capital	13.7
Wells Fargo Investment (collective fund)	11.7
Davis, Weaver & Mendel (three-way)	7.3
Schield Management	7.0

TAA managers holding firm

Most retain their allocations following rough year in 1989

By Trudy Ring

Tactical asset allocation managers are sticking to their guns, though many suffered in 1989 because they were poised for a downturn in the stock market that never materialized.

The managers, holding large cash positions, underperformed both the stock market and a static mix of 60% stocks and 40% bonds. But managers, clients and consultants said the strategy shouldn't be condemned just because of the 1989 results.

The reaction has not been a wholesale move back to equities, though some firms increased their equity allocations in late 1989 or early 1990. Most firms' models have a neutral view of the equity market; any bullish or bearish signals are moderate.

Those who were heavily in cash last year took that position largely because their models perceived the stock market as high-risk and driven by factors other than fundamentals, such as takeover plays.

Their more neutral posture now has been driven by factors like interest rates and market liquidity, but their models indicate no fundamental changes.

The past year turned out to be excellent for both the stock and bond markets. The Standard & Poor's 500 Stock Index returned 31.6%, while the Shearson Lehman Hutton Government/Corporate Bond Index returned 14.2%. A mix of 60% stocks and 40% bonds, using these indexes, would have returned 24.6% for the year.

The median tactical asset allocation manager in Callan Associates Inc.'s universe returned 21.9% for the year; the median allocator in DeMarche Associates Inc.'s universe returned 19.8%.

"Most have been positioned for a falling stock market, and it simply didn't happen," said William Koehler, director of research for DeMarche, Kansas City, Mo.

But tactical asset allocation is not designed to add a lot of value in a steadily rising stock market.

Joanne M. Hill, first vice president of PaineWebber Inc., New York, said the strategy tends to underperform strong equity markets; what may be unusual about 1989 is the extent of the underperformance. The year, however, did not refute tactical asset allocation, because the strategy is likely to beat a 60%-40% stock-bond mix a good deal of the time, she said.

"What is troublesome is that many people bought into asset allocation on the 1987 results," she said. That year, many allocators beat the stock market because they were underweighted in equities going into the Oct. 19 plunge. "People who looked at that as a typical year were bound to be disappointed."

See **TAA managers** *on page 37*

For foreign funds, Japan barely opens door

By Robert C. Pozen

Investment trusts are big business in Japan, with 57 trillion yen ($395 billion) managed in stock and bond funds. But this business is run by only 15 investment management firms, all affiliated with Japanese brokers and all hand picked by the Ministry of Finance.

In December, the ministry announced guidelines for application by foreign firms to manage Japanese investment trusts, their version of mutual funds, whose rules are separate from those involving management of Japanese pension funds. Newspaper reports indicated the ministry will allow four or five foreign firms to join the cartel to manage these trusts. The guidelines, however, impose several onerous criteria, leaving one to wonder: Is this opening more illusion than reality?

First, the management company must be a separate entity with minimum capital of 500 million yen ($3.5 million). This capital must be contributed almost entirely by the foreign firm; no joint ventures with Japanese companies are permitted except for a single 5% minority interest.

Second, the management company may not contract out any administrative functions to a third party. In most countries, accounting and custodial tasks for the fund are performed routinely by banks and other financial institutions.

Third, the guidelines suggest the management company needs to have about 30 professionals in Japan dedicated to running the fund business. This would preclude foreign firms from relying in a meaningful way on their existing research groups outside of Japan.

Finally, the foreign firm must project a surplus within five years, based on realistic estimates of expenses and fund sales. This is very difficult given the local office requirements and practical restraints on fund distribution — the major Japanese brokers already are affiliated with funds, and direct marketing of Japanese funds is unknown.

The new rules represent a significant improvement over the existing situation for U.S. fund managers. At present, foreign firms are legally relegated to offering Luxembourg-based funds denominated in currencies other than yen. Imagine trying to sell a dollar-denominated fund to the average Japanese investor who has watched the yen soar over the last decade!

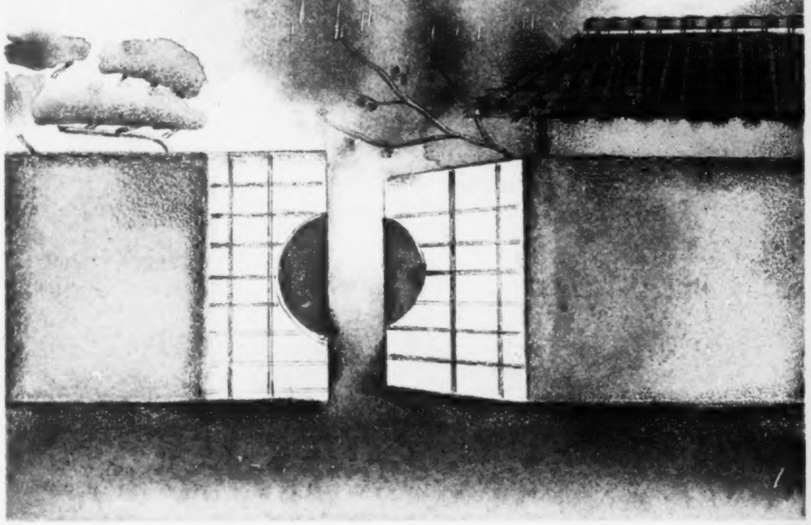
These Luxembourg funds aren't allowed to invest more than 50% of their assets in Japanese securities. This has been a severe handicap, because the Japanese stock market has been one of the best performers in the world.

Still, entry barriers to the Japanese fund market remain much higher than the barriers faced by Japanese firms seeking to create U.S. mutual funds for U.S. investors. For example, any Japanese firm may become the sponsor of a U.S. mutual fund by registering with the Securities and Exchange Commission and capitalizing the fund with $100,000.

The SEC does not limit the investment management industry to a small number of licensees; it processes all applications on a relatively objective basis. The SEC has no minimum requirement for local employees; nor does it prohibit new funds from contracting out most administrative functions to third-party processors. Finally, while Japanese funds face some difficulties in breaking into the U.S. market, they have the benefit of a relatively broad array of distribution outlets — direct marketing, brokerage sales and joint ventures.

Though the ministry appears to be opening the door to foreign firms, the door in fact is still closed to most foreigners. Only a few will be willing and able to incur the high costs required to meet the criteria. ■

Mr. Pozen, general counsel of FMR Corp., Boston, is a member of the U.S. Committee of Experts that is engaged in reciprocity discussions with the European Federation of Investment Funds and Companies. His article represents solely his personal views and not those of FMR or the committee.



Judy Jarrett

End paternalism, involve employees more

By Herb Ruben

It comes as no surprise to those of us involved in corporate benefits administration that America is aging — rapidly. The first of the Baby Boomers are already in their 40s, and the pre-retiree group of ages 45 to 64 makes up 25% of the adult population.

With one's retirement period now likely to last upward of 20 years, Merrill Lynch commissioned a study to find out just what people expect from those years and how those expectations will be financed.

The survey focused on the attitudes and practices of two key groups: individuals approaching retirement age and company benefits managers.

Our study identified a number of alarming conflicts, many centering on the widening gap between what the pre-retirees expect from retirement and the reality of what they will be able to afford.

For example, 72% of the pre-retiree respondents expect no change in lifestyle after retirement. But one-fifth of them say they have done little or no planning for their financial needs, and relatively few are putting major portions of income in retirement plans.

While 76% agree that "it is up to me to save for retirement," about one-third believe the government should take responsibility for funding retirement. Nearly half believe their employer has responsibility to provide adequate benefits.

Which brings us to another set of conflicts: those between employees and benefits managers. The two groups disagree sharply about the employee's role in the direction of investment in a retirement account. Ninety percent of pre-retirees believe it is important they be involved vs. only 46% of benefits managers.

The employees, by the way, appear to be more in the national mainstream, where we see the government recognizing participation and control through pension regulations issued by the Department of Labor such as 401(k) policies, providing for more employee involvement.

In analyzing the survey results, we have concluded that individuals should assume greater control over their financial future. Naturally, this would include exercising more choice in the company retirement plan. Importantly, individuals must begin much earlier to make the investment decisions that will enable them to enjoy the retirement lifestyle they are expecting.

Employees, therefore, must be better informed as to the amount of income needed to cover increased longevity and long-term care. They also must be more realistic about the provisions of Social Security and employer benefits as well as the effects of inflation and housing and health-care costs.

Individuals cannot shoulder the full burden; neither can the employer, nor the government. There must be a partnership of all three in successful retirement planning.

The corporation — the employer — no matter how large or small, must begin to educate employees about their responsibilities in coping with the realities of retirement. Rather than continuing paternalistic attitudes that foster a false sense of well-being, companies must work with financial institutions to help employees develop and direct realistic financial plans.

Companies should encourage employee participation and choice in retirement benefit plans. It raises the level of employees' involvement in their future. It also enhances employee identification with corporate goals.

The government, for its part, must begin to listen to the very real concerns of responsible citizens, corporations and the financial institutions that serve them. The government must encourage savings and investment and start to reverse the trend that has put our country's personal savings rate at the lowest level in the industrial world.

Government also must address the crisis of mounting costs for long-term care that is an underlying worry for those approaching retirement. ■

Mr. Ruben is senior vice president in Merrill Lynch Consumer Markets' group financial services division, Princeton, N.J.

LETTERS TO THE EDITOR

Another shorting strategy

■ I read with great interest the Portfolio Management article in the Feb. 5 issue by Alan J. Strassman and William E. Jacques on their strategy of using short positions to hedge long positions in equities.

At my firm, we have been employing a methodology quite similar to this for the past four years, with good results. The actual implementation of the strategy is slightly different from theirs at Martingale. Our work would differ with the concept that 90% of a stock's movement is caused by the stock market. Surely, Messrs. Strassman and Jacques would not contend a gold stock, for example, is influenced primarily by the market in general rather than by movements in the gold price.

Our experience has found it is appropriate to analyze the anatomy of price moves individually, industry by industry and stock by stock, dollar balancing our longs and shorts. Our representative account has done well since inception in 1986, but as Mr. Strassman and Mr. Jacques contend, the results seemed most impressive during the market breaks of 1987 and 1989. The account earned 0.8% in October 1987 vs. a decline of 21.8% in the Standard & Poor's 500 stock index. In October 1989, the same account showed a 2.2% gain vs. a 2.5% decline for the S&P 500.

Our experience over the four years has convinced us that this "consistent return" strategy can improve risk/return relationships in balanced portfolios.

Further experience with this discipline can be expected to win it more disciples.

Robert H. Stovall
Twenty-First Securities Corp.
New York

Scorecard amount in error

■ We were flattered to be included in your Feb. 5 Scorecard report of the most new balanced business. Although we enjoyed a very successful year, the amount reported by us of $168 million was considerably overstated. The appropriate amount should have been $35.4 million.

We certainly regret this oversight.

Jeffrey P. Moody
Vice president
Midlantic National Bank
Edison, N.J.

Ms. Hudson-Wilson is vice president and director of market research at Aldrich, Eastman & Waltch Inc., Boston, a real estate investment management firm.

Doubt surrounds realty return data

By Susan Hudson-Wilson

Are measures of real estate returns wrong?

I'm not so sure. The conventional wisdom on the standard measures of real estate risk and return is pretty clear: the returns are overstated and volatility is understated. The returns and the risk together do not accurately capture the "true" behavior of real estate markets.

It's a pretty important problem — if it's true. It really throws off the most rigorous asset allocation exercises. The adjustments made to the data to compensate for the "error" make a mockery of all that sophisticated, "hands off" technology.

Recently, in the course of working on a book of readings in real estate for the Association of Investment Management and Research, I have scoured the literature. Here and there, in dribs and drabs, questions have been raised about the comparability of real estate return data and data on the performance of other assets, notably stocks and bonds. Collected together, these bits and pieces generate significant questions about the veracity of the conventional wisdom. I do not know what the answers are, but I will share the questions with you.

The easiest criticism of real estate returns is that they suffer from the dreaded "appraisal bias." This bias is alleged to dampen volatility by truncating the range of property values and, so, property returns. The critics claim that appraisals systematically overstate property values.

A very good study — done by Rebel Cole, David Guilkey and Mike Miles in 1986 — concludes "it just ain't so." These researchers do not find a systematic differential between appraised values and net sales prices. The research does find that individual property's true and appraised values may differ considerably, but at the portfolio level these differences "wash out." The research does not, however, analyze the more subtle question of lags. Perhaps appraisals are merely slow to respond to market cycles, but they capture the extremes. On average, there would be no systematic bias. I'm just not sure.

Next, let's review five ideas that, taken in combination with the evidence on appraisals, may suggest the real estate performance data just could be right.

• Leverage. Most of the "problem" with the real estate data is it just will not confirm our expectations of how it ought to look — especially with respect to its presumed brethren, stocks. We compare unleveraged real estate returns with the stock market returns of leveraged firms. Unleveraged real estate is a viable investment option. Perhaps we should accept it for what it is.

Summary: Quarterly returns

	Average return	Standard deviation	Avg. return/ standard deviation
Property	2.83	1.39	2.03
S&P 500	4.22	7.90	0.53
Bonds	2.61	4.70	0.56
T-bills	2.21	0.65	3.41

All statistics, first quarter 1978 to fourth quarter 1989

• Cash Flow Stability. Again the comparison is between stock and real estate equity. When fairly constant price-earnings multiples, or their cap rate inverses, are used to value the asset, is it any surprise corporate earnings are more volatile than net operating incomes from properties? Net operating income comes from leases with relatively long terms; earnings come from daily business transactions in the marketplace.

• Liquidity. It's a commonly accepted thesis that investors prefer liquidity and so must be paid to give it up. They can get paid in two ways: through higher absolute returns or through lower risk. In either case, they achieve a differential in risk-adjusted returns as their compensation. The average private market real estate transaction is, of course, significantly less liquid than the average stock market transaction. Are the data wrong or are they reflective of substantive differences in the investment vehicles?

• Private Market Transactions. While we are on the subject, let's think about the question of investment structure. Private market transactions are crafted carefully by the providers of capital. The users of private market capital are structure takers, not makers. Providers ought to get paid for the exercise of market power. Perhaps they do.

Is it possible real estate returns are a proxy for the otherwise unobservable returns of the very large private market that includes venture capital, oil and gas, timber and other non-traditional assets? What is the total size of the private market? Are we already implicitly allocating large portions of our portfolio to it? If we are not, should we? Is this the message of the asset allocation models?

• Transaction and Information Costs. This final observation is exactly analogous to the argu-

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Divestiture lost steam in '89

WASHINGTON — Only three olleges and universities adopted r made substantive revisions in outh Africa-related divestiture olicies in 1989, according to a tudy by the Investor Responsibil-ty Research Center.

This is down from a peak of 32 ducational institutions taking uch action in 1985. The number ropped to 29 in 1986, 14 in 1987, nd eight in 1988.

An exception to the general rend in 1989 was Dartmouth ollege, Hanover, N.H., which in ovember moved to total divesti-ure from partial divestiture of ecurities in companies operating n South Africa.

Several factors have cut down n student activism and, there-ore, divestiture activity since mid-1986, the IRRC reported. One was South Africa's imposition of a state of emergency that severely hampered news organizations' ability to report on political developments there.

As a result, the report noted, "Network news programs were no onger inundated with the graphic pictures of white policemen beating black protestors with rubber whips and truncheons that had served so well to focus the U.S. public's attention on the policy of apartheid."

Two other factors were the enactment, in October 1986, of the U.S. Comprehensive Anti-Apartheid Act, which included a ban on new U.S. investment in South Africa, and the continuing number of U.S. companies withdrawing from South Africa.

"With so many companies pulling out of South Africa, and new investment against the law, student activists found it hard to convince their fellow students of the need to continue exerting pressure on their boards of trustees to adopt divestment measures," the report said.

Finally, increased awareness of racism on their own campuses has diverted much of students' and administrators' attention from South Africa, the IRRC noted.

If student pressure remains on the wane, few schools will move toward total divestiture, and some might try to reverse the steps they have taken, the report predicted. Nonetheless, South Africa-related divestiture will remain an issue on many campuses that have yet to take any steps toward it or that have policies calling for partial divestiture.

Of the 93 institutions that responded to the IRRC's survey, 36 have total divestiture policies, 40 have partial divestiture and one has a policy that prohibits only new investments in companies with South Africa operations.

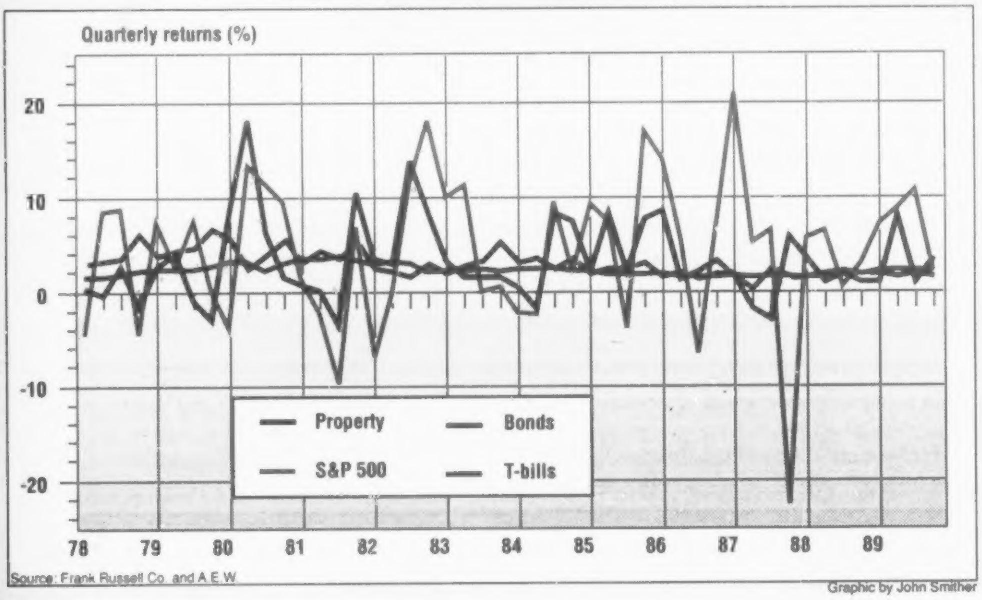
Several institutions have begun applying their divestiture policies to foreign securities, and one extends its policy to companies with non-equity ties, such as licensing or distribution arrangements, in South Africa.

Some schools do not apply their divestiture policies to bondholdings or commingled funds. About 13% of the $15 billion held by respondent schools was exempt from the policies.

The full report, "Divestment on Campus: Issues and Implementation," is available for $45, prepaid, from IRRC, 1755 Massachusetts Ave., N.W., Suite 600, Washington, D.C. 20036. ■

Return performance

(Unleveraged real estate vs. other assets)



Source: Frank Russell Co. and A.E.W.

Graphic by John Smither

Doubt

Continued from page 30

ment for liquidity compensation. Transaction costs in real estate may be as much as ten times greater than those in the stock market for some transactions. It is absolutely certain that investors will need to be compensated for this obvious cost. Information too is far more expensive in the relatively less efficient real estate market than its publicly traded counterparts. Over time, as the field of real estate research matures and as interest in the asset grows, we can expect information costs to fall. But for now, investors have a way of getting paid for their troubles.

So, are the data wrong? Or is the conventional wisdom wrong and perhaps a bit simplistic? I'm not sure anymore. The recently available time series on real estate returns may have provided the investment community with a glimpse, through a small crack, at the large and attractive world of the private capital market. ■

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TAA managers

Continued from page 3

Officials of several pension funds, including those of K mart Corp., San Diego Gas & Electric Co. and the city of Cincinnati, said they're keeping their faith in tactical asset allocation.

The $1.1 billion K mart defined benefit fund's TAA manager, Avatar Associates, New York, returned 22.5% for the year — its biggest degree of underperformance of the S&P 500 in the more than five years it has managed money for K mart, said John Steinbach, assistant treasurer and investment manager at the Troy, Mich.-based company. Avatar has outperformed the market significantly in bad years for stocks, having been up more than 20% in 1987 while the S&P 500 was up 5.2%, he said. It had the best return of any of K mart's managers that year, he said.

In good years for stocks, Avatar has captured a significant amount of the market's gain, he said.

"Our objectives are to participate in rising markets and to preserve capital in falling markets," said Bruce Poliquin, Avatar vice president. Avatar had a low equity weighting early in the year, built it up over the summer, cut back again in the fall and built it up later in the year, to 80% at year end.

Avatar cut that back to 65% early this year, then boosted it to the current 70%. This represents moderate bullishness, due largely to positive market liquidity factors, Mr. Poliquin said. The risk in stocks, however, is still too high for Avatar to be fully invested, he said.

Officials of the $940 million Cincinnati Retirement System saw their TAA manager, Renaissance Investment Management Inc., Cincinnati, stay out-of the equity market much of the year. This was the first year Renaissance, which has managed money for the Cincinnati system since 1986, had less than double-digit returns, said Frank Dawson, the system's director of finance. Renaissance averaged a 5.4% return in 1989, having been 100% in cash from January until October.

Still, the Cincinnati fund will watch Renaissance's performance over a full market cycle, Mr. Dawson said. "We're not going to make any rash decisions based on a one-year performance," he said. Renaissance runs $37.4 million for the system.

Renaissance moved to 50% stocks, 50% bonds in October and has remained there, said Mike Schroer, vice president and director of research. With the drop in short-term interest rates and increase in corporate earnings and dividends, Renaissance's model indicated stocks and cash were equally attractive, spurring the move, he said.

The $390 million San Diego Gas & Electric Co. pension fund also will give the strategy more time. "The strategy certainly requires more than a market cycle to prove itself," said Charlie McMonagle, manager of financial services. The fund has about 10% of its assets in a tactical asset allocation strategy managed by Wells Fargo Investment Advisors, San Francisco.

Mr. McMonagle said that during 1989, the account was about 80% cash, 20% equities; Wells has authority to use bonds as well.

Patricia Dunn, president at Wells Fargo, said: "1989 was a year when we bore some opportunity costs, which is not unusual for tactical asset allocation strategies to do." Such strategies tend to be positioned well in advance of a change in market direction, she said.

Wells Fargo manages $10.5 billion in TAA accounts. A $3.4 billion collective TAA fund, whose results are submitted for Pensions & Investments' PIPER+ survey returned 11.7% for the year. San Diego Gas & Electric is not in that particular collective fund, she said.

Ms. Dunn said the TAA accounts were underweighted in equities in 1989, implying a defensive view of the stock market; for longer periods, however, TAA accounts are likely to outperform their component asset classes. "We wouldn't do it if we didn't think there was a payoff," Ms. Dunn said.

Other TAA managers on the lower end of the return rankings also underweighted equities. "We were out of stocks between 60% and 70% of the time," said Marshall Schield, president of Schield Management Co., Denver, which returned 7%. The year was a good one for stocks in the S&P 500, but the firm's model responds to the broader equity market, and it wasn't a good year for non-S&P stocks, Mr. Schield said. The roughly 1,200 stocks that are included in the Value Line Index but not the S&P 500 were up only 2.5% for the year, he said.

Schield has remained bearish on stocks this year, with about 90% of assets in cash.

First Quadrant Corp., Pasadena, Calif., whose primary TAA strategy returned 15.8%, and TSA Capital Management, Los Angeles, which was up 13.7% with its primary TAA strategy, also had relatively large cash positions.

"Everybody has certainly been examining their models . . . but there are always forces at work you can't model," said Richard Boling, TSA managing director.

Toward the end of last year, First Quadrant moved back toward its benchmark equity position and has remained there; its bond exposure is about half in cash because of the flat yield curve, said Tim Meckel, associate. Its benchmark mix is roughly 60% stocks, 40% bonds.

TSA's model was about 10% overweighted in equities by December; in the new year, it's tilting toward bonds, Mr. Boling said.

Higher performance numbers came from firms that were near normal or overweighted in stocks. These included Bankers Trust Co. — Investment Management Group and M.D. Sass Investors Services, both of New York; Mellon Capital Management Corp. and Quanti-Logic Asset Management Co. Inc., both of San Francisco; and Matrix Capital Management, Greenwich, Conn. ■

Investor muscle

Continued from page 1

failed to make accountability of management a priority.

"Boards of directors, even though they have been elected by shareholders, have been overly insulated from shareholders and the communication process for too long," Mr. Wilcox said.

"The board of directors has to be more independent, more responsive and interested in the viewpoint of the shareholders."

Beyond demanding more from directors, shareholders will try more approaches to activism — from letter-writing campaigns targeted to boards of poor performing companies to adding more kinds of issues to the proxy. All the panelists said shareholders' agendas should be limited, but there was no agreement on where to draw the line.

Ms. Minow said "shareholders should be a lot more focused on the composition and structure of boards."

Mr. Regan said he doesn't like the idea of shareholder resolutions on issues such as confidential voting because they are not tackling the important topics with which stockholders should be concerned, such as how boards select a successor to the chief executive.

But Mr. Wilcox said he is concerned too much power is being accumulated by institutional investors.

"I am concerned about too much concentration of power anywhere, whether it's in management or institutional shareholders . . . I'm concerned that degree of power is dangerous, and how do we structurally avoid concentrations of power."

In his view, the balance of power has shifted from corporate managers who are accountable to boards of directors to institutional shareholders who aren't accountable to anyone and have only financial interests in mind.

"What we have is a group of very homogeneous investors with roughly all the same financial objectives, and that creates structural problems for any democratic system . . . ," he said.

Institutional investors aren't homogenous, Ms. Minow and Mr. Regan countered. They said institutional shareholders have myriad investment objectives and opinions; financial rewards are not the only thing they consider in buying and holding stock.

"I think the answer to the accumulation of power — whether it's in management or institutional shareholders or whether it's in politics — is accountability," Ms. Minow said.

But Mr. Oliver challenged the assertions of all three. "Everybody seems to say that they're worried about the concentrations of power. I say what's wrong with it?" he asked. "And accountability to whom? If the stockholders are the owners of a large public company, are taking control of the enterprise and they're the ones who are basically telling the management what to do, what is wrong with that? Why are they any less accountable? Why is that system any less effective than any of the very large companies in this country that are not publicly owned and whose direction is dictated by family (members) or a few trusts."

Corporations have been writing the rules, Mr. Regan said, "so where is the damage in bolstering accountability?" ■

Report offers ethical values for inclusion in dealmaking

Now that mergers, acquisitions and takeovers have slowed, the major players should make time to digest an unusual new report on the weightier issues associated with corporate restructuring.

Ethics and corporate takeovers can — and should — mix, says a report published by the Woodstock Theological Center at Georgetown University, Washington.

And the center has a prescription to help achieve that mix — a set of ethical values corporate executives, bankers and lawyers should strive to honor.

The center also suggests dealmakers clarify the ethical issues that might arise by making a list of all the parties affected by the transaction. To add teeth to the effort, the center devised a detailed checklist of questions dealmakers should ask themselves.

The report also said increased regulation isn't needed, but a few reforms are. Changes might be needed in the tax treatment of interest payments at the corporate level and capital gains at the personal level. And corporate voting rights rules should be adapted so only those investors who hold corporate stock for some minimum amount of time would be allowed to exercise those rights.

Global Institutional Investment Trends

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AT DEADLINE

3 to meet with Exxon exec

Leaders of three activist public funds, all large Exxon Corp. stockholders, will meet with Exxon chief executive Lawrence Rawl April 4 to discuss the company's environmental record.

The three are Elizabeth Holtzman, New York City comptroller; Gray Davis, California comptroller; and Paul Quirk, executive director of the Massachusetts Pensions Reserve Investment Management Board. The funds own a total of more than 14.5 billion Exxon shares.

Watergate Hotel sale set

The $20 billion British Coal PLC pension fund has reached a tentative agreement to sell Washington's famous Watergate Hotel, reportedly to Trusthouse Forte PLC, a British hotel and catering company.

Paul Whitney, chief executive of CIN Management Ltd., the British Coal subsidiary overseeing the pension fund, confirmed the agreement had been reached but declined to name the buyer or state the price. A Trusthouse Forte official said the reports correctly named all the bidders, but nothing has been finalized.

Homart, Yarmouth do REIT

Homart Institutional Partners — a joint venture between Homart Development and The Yarmouth Group — will try to raise $700 million from domestic and foreign institutional investors for a private placement real estate investment trust composed of Homart portfolio properties.

Funds announce hirings

Two companies hired equity managers for pension and foundation assets.

The $960 million Fluor Corp. pension fund hired GeoCapital Corp. to run a $25 million account. The hire represents the Irvine, Calif.-based fund's first move into small-cap equities.

The Rehabilitation Institute of Chicago hired Cedar Hill Associates Inc. to manage $12 million in equities for its $36 million in foundation and pension assets.

Merger called off

CSX Corp. and Richmond, Fredericksburg and Potomac Railroad Co. terminated plans to merge the two Richmond-based companies, ending a four-week controversy over whether the $385 million deal made sound investment sense. The controversy led to the early retirement of Charles B. Walker as chairman of the $10.2 billion Virginia State Retirement System, which has a 20% stake in RF&P.

LOR exec to join Goldman

Girish V. Reddy, former senior vice president of Los Angeles-based Leland O'Brien Rubinstein Associates Inc. will join Goldman, Sachs & Co.'s global equity derivative products group in London as a vice president and head of research.

Short-term gains tax is squelched

Controversial bill may be replaced by other measures

By Joel Chernoff

WASHINGTON — A hotly contested bill to tax short-term gains of pension funds appears to be derailed, but pension executives shouldn't pop the cork yet.

A cool reception to the tax by Treasury Secretary Nicholas F. Brady and admissions by the sponsors of the bill — Kansas Republicans Nancy Kassebaum and Robert Dole — that they were willing to look at other measures, pretty much spells the legislation's end, at least for this year.

But other signs indicate that won't be the last word on the issue of discouraging short-term trading practices by institutional investors — or, conversely, of encouraging them to expand their role as long-term owners of U.S. corporations.

At a March 21 Senate Finance Committee hearing, Mr. Brady praised the objective of encouraging long-term investing, although he is opposed to using the tax system to arm-twist investors except "as a last resort." He also said further clarification of the 1974 Employee Retirement Income Security Act might be needed.

"Perhaps we should apply ERISA rules to make clear that the fiduciary duty to maximize return for fund beneficiaries is best achieved by long-term investing, not short-term trading," he said.

Last year, the Treasury and Labor departments tried to jawbone pension executives into taking a longer-term outlook, saying funds are not obligated to sell their shares when facing a tender offer if they think values can be maximized by current management or in some other fashion.

The results of that policy statement have been disappointing, Mr. Brady said, and officials from the two departments will resume discussions on how to give pension fund managers "more conviction, courage and legal authority" to turn down takeovers

See **Kassebaum** *on page 51*

Sen. Nancy Kassebaum's bill may have to wait until next year.

Braselton
Atlanta
N
100 miles

Film star Kim Basinger has cast the $14.3 billion Ameritech pension fund in a supporting role for her development plans in Braselton, Ga., 40 miles northeast of Atlanta.

Ameritech co-stars in Basinger deal

By Terry Williams

The envelope, please.

And the Oscar for the best supporting actor goes to: The Ameritech pension fund for its performance opposite Kim Basinger in Braselton, Ga.

Actually, the relationship between the glamorous film actress, who has starred with such leading men as Mickey Rourke and Michael Keaton, and the pension fund is just a business one.

The pension fund is an investor in the $20 million Braselton/Basinger Limited Partnership, which is considering building an entertainment complex and undertaking restoration of the buildings in Braselton, a town of 500.

Ms. Basinger — who has performed in 14 motion pictures, including "The Natural," "9½ Weeks" and "Batman" — earlier this year announced the partnership paid $20 million for about 1,700 acres that included more than 50 buildings — many with ongoing small businesses — a 671-acre industrial park and 500 acres of potential residential land.

Steve Ford, a spokesman for American Information Technologies Corp., Chicago, confirmed the $14.3 billion pension fund is a limited partner in the Braselton/Basinger partnership. He declined

See **Basinger** *on page 52*

Foreigners invade U.S. paper market

By Marlene Givant Star

The recent climb overseas of long-term interest rates and banks' temperance about making bridge loans are spurring foreign companies to use commercial paper programs as temporary financing for U.S. acquisitions.

The foreign share of total commercial paper outstanding of nonfinancial corporations in the United States rose to 15.2% as of Dec. 31, from 11.3% as of Sept. 30, according to Merrill Lynch Capital Markets. As the yield curve has steepened in the past three months, commercial paper issued by non-financial corporations has soared (on an annualized basis) nearly 36%, to almost $140.3 billion March 7 from $125.4 billion Nov. 8 on a seasonally adjusted basis, according to Merrill Lynch.

The climb in interest rates in Japan to support the falling yen and the United Kingdom's longtime high interest rate climate have domestic companies in both countries looking to the $500 billion, highly liquid U.S. commercial paper market as the cheapest way to finance acquisitions. The companies typically launch commercial paper programs under the Securities and Exchange Commission's 4(2) designation, which is for acquisition finance and to pay down the paper soon after, refinancing it with longer-term debt or other short-term funding when a rate window occurs.

Sony Corp.'s acquisition of Columbia Pictures Entertainment Co. last autumn represented the first time it used U.S. commercial paper for an acquisition.

British Petroleum Co. PLC, London, has used U.S. commercial paper to finance acquisitions in the United States as well as abroad, and Grand Metropolitan PLC, London, recently used commercial paper to finance its Pillsbury Co. acquisition.

"The Japanese have always been active in U.S. commercial paper, but activity has increased as U.S. (mergers and acquisitions have) increased in the past 18 months," said Ted Roosevelt IV, managing director at Shearson Lehman Hutton Inc. He said Shearson is working with a large number of U.K. and some continental Europe companies planning U.S. acquisitions, which should result in increased paper programs.

Foreign companies also are turning to the commercial paper market because commercial banks, trying to control their balance sheets' highly leveraged transaction exposure, now are re-

See **Paper** *on page 49*

Grand Met's purchase of Pillsbury was financed with U.S. commercial paper borrowings.

NEWS DIGEST

The retirement of Peter Lynch is not expected to harm Fidelity or its Magellan megafund. Page 4.

Turner Neill Investment Partners, a new money management firm started by former executives of Meridian Investment Co., is gaining its first batch of clients. Page 6.

Labor Department proposals to toughen enforcement of ERISA would expose employers to increased liability and shift some policing to the private sector. Page 11.

The Rhode Island Retirement System joins a growing list of public pension plans financing economic development in their home state. Page 42.

A barrage of tax laws enacted in the 1980s has made pension administration unwieldy and costly, pension experts claim. Page 54.

Some activist public funds are catching heat from other public fund officials, a Los Angeles County administrator claims. Page 54.

The State of Connecticut Trust Funds has become part owner of the Colt firearms division. Page 55.

The California Public Employees' Retirement System is ready to help reshape corporate America with $1 billion. Page 55.

SPECIAL REPORT: EMPLOYEE BENEFITS

The ever-changing landscape in the employee benefits area is the subject of an in-depth report by *Pensions & Investments*. Page 21.

FINANCING

Foreign companies are turning to commercial paper for temporary financing of U.S. acquisitions. Page 1.

Innovative derivative products from chic country markets are being created by Wall Street to tempt institutional investors. Page 10.

Wolverine Exploration Co. is coming to market with a $40 million stock issue to redeem notes and finance an aggressive energy exploration program. Page 34.

INTERNATIONAL

British Coal is putting a fine brush to its venture capital efforts in the United Kingdom, in Europe and in the United States. Page 8.

Swiss-based CIBA-GEIGY A.G. is opening its registered shares to foreigners to makes its stock more attractive to investors outside Switzerland. Page 38.

The Group of Thirty's plan to speed international settlement and clearance seems to be working. Page 44.

REAL ESTATE

Two pension funds are reducing real estate partnership interests with Grosvenor International Holdings. Page 2.

The First Wachovia Real Estate fund, hit by a number of withdrawals, is changing its strategy. Page 32.

The rate of Japanese investment in big U.S. office buildings is dropping, in part because American institutional investors are coming up with more cash. Page 36.

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2 funds cash in on real estate

Grosvenor partners selling interests

By Steve Hemmerick

The Teachers Insurance and Annuity Association has decided to take some of its profits out of the coveted Honolulu property market, and the Grand Metropolitan PLC pension fund is selling its shares in two Canadian-based partnerships to reduce its pension fund's allocation to real estate.

Both TIAA's and Grand Metropolitan's affected investments are, coincidentally, in partnership interests with Grosvenor International Holdings Ltd., Vancouver, British Columbia, an international real estate adviser and co-investor.

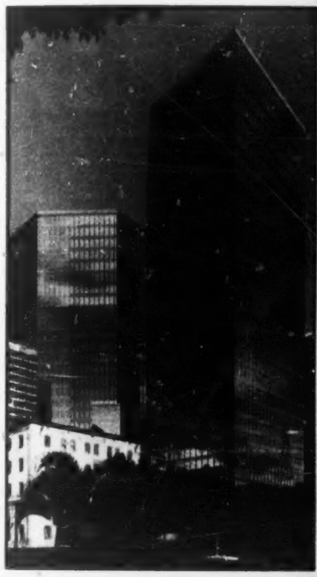
TIAA, New York, with $81 billion in assets, is selling its 80% interest in the Grosvenor Center, two 30-story office towers with 620,000 square feet of space in Honolulu, to a Japanese investor. Grosvenor retains its 20% interest in the two buildings.

The selling price was not announced, but the compound annual return on the approximately 8-year-old investment for TIAA will be in "excess of 20%," according to Alan Lang, a real estate investment officer with the pension fund.

TIAA is selling at a time when Honolulu should be one of the five fastest rising markets in the United States during the next five years, according to Jack Barthell, a managing partner in the consulting division of Kenneth Leventhal & Co., Los Angeles. While prices could go higher for Honolulu real estate, it still could be a good time for a pension fund to sell in Honolulu, said Mr. Barthell. The sell decision would have to depend partly on the cash needs of a pension fund and the current value of a property in the marketplace, he said.

In addition, he said, clearly the current real estate market in Honolulu is liquid because of the desire of investors worldwide to

See **Grosvenor** *on page 53*

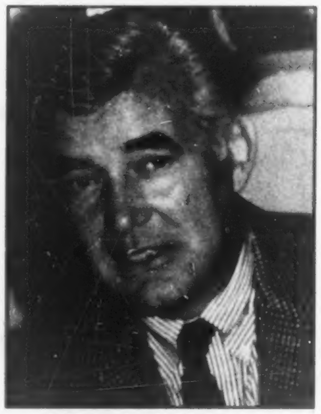


TIAA is selling its 80% stake in Grosvenor Center.

Quant expert goes to manager

Dorian takes jump to First Quadrant

By Curtis Vosti and Barry B. Burr



John Dorian has joined money manager First Quadrant.

John L. Dorian, the statistician who achieved skyrocketing performance running the in-house core equity portfolio of General Dynamics Corp.'s pension fund, left the St. Louis-based defense contractor to join First Quadrant Corp. as a managing director.

First Quadrant, based in Morristown, N.J., is best known for its tactical asset allocation models, and is trying to become better known for quantitative strategies. It is in the latter Mr. Dorian also has earned notoriety.

Mr. Dorian, as General Dynamics' corporate director of equity investments, managed since mid-1987 an enhanced indexed portfolio he said outperformed every one of the $3.9 billion General Dynamics defined benefit fund's 10 outside equity managers and the Standard & Poor's 500 Stock Index. From July 1, 1987, through Dec. 31, 1989, the latest date for which performance is available, he said the in-house portfolio beat the S&P 500's cumulative return of 26.7% by a cumulative 290 basis points.

Charles D. Walbrandt, GD's staff vice president, confirmed the superior performance of the portfolio and said, "John's a big loss. We'll miss him."

The portfolio, which began with $100 million, has grown through performance and additional funding to $490 million, now accounting for virtually all of General Dynamics' internally run equities and one-third of its total $1.37 billion equity allocation.

Although the resignation was unexpected, Mr. Walbrandt said Mr. Dorian is leaving on amicable terms. He said the new position is a good opportunity for Mr. Dorian.

A successor to Mr. Dorian, who makes his transition between jobs this week, hasn't been named. "We may look internally or externally," Mr. Walbrandt said, adding "Mr. Dorian has a very capable assistant (Bruce Dirks, corporate manager of equity investments) who worked with him. I would feel comfortable giving him a shot at running the portfolio."

Mr. Walbrandt said General Dynamics will maintain the portfolio. "It could go for 60 to 90 days without being rebalanced."

"It's a very disciplined approach," Mr. Dorian said. "Without any further enhancements, I think it will continue to be powerful for a while.

"(Mr. Dirks) has all the skill and technology necessary to continue to maintain the portfolio."

Robert D. Arnott, First Quadrant president and chief investment officer, said he had been trying for several years to hire Mr. Dorian.

See **Dorian** *on page 50*

Cash flow gains new respect

By Fred Williams

Corporate financial executives are turning their attention to cash flow forecasting in an effort to cut costs and tap new sources of funding.

Cash flow forecasting is taking on added importance in many companies looking to increase overall efficiency and as chief financial officers look to cash management as a cheap source of internally generated funding.

"Corporations are beginning to make more efficient use of internally generated cash flows; corporate America has become more lean and mean, cutting back on overhead and tipping the operating leverage in their favor. As they begin to tip the operating balance, they are looking at internal efficiencies. Internally generated funds is one way they are doing it," said Michael Rohm, former assistant treasurer at Entergy Corp., New Orleans, and now senior vice president at JMC Capital Management Inc., Metarie, La.

"What you earn in a slow growth economy, as we have now, goes to cash management. It can be used to finance continued growth of the company from internally generated sources and internally generated funds are what cash managers are responsible for," said Mr. Rohm.

Michael Rohm

From a corporate stand point, cash flow forecasting involves the prediction of corporate cash receipts and disbursements and resulting balances over short time horizons — from one day to

See **Forecasting** *on page 53*

PEOPLE

Terry lured away from Bay Area

■ Thomas D. Terry, the Treasury Department's first benefits legislative counsel, has left his heart in San Francisco.

The well-respected and likable Mr. Terry started his new job February 26. His family remains in the Bay Area, but the draw of helping set the government's benefits policy after 22 years in private practice was too tempting.

"My wife made me sign a pledge" to travel between Washington and his home in Marin County, explained the 55-year-old tax attorney, who left his partnership at the San Francisco law firm of Morrison & Foerster.

In the newly created post of top benefits adviser to Ken Gideon, assistant secretary for tax policy, Mr. Terry hopes to simplify rules governing employee benefit plans. For starters, he will focus on the IRS' complex non-discrimination rules, as well as easing taxation of distribution rules, and promoting the Bush administration's proposals modifying individual retirement accounts and creating family savings accounts.

Photo by Tom Reed

Thomas Terry will be a frequent Washington-San Francisco flier.

INTERNATIONAL

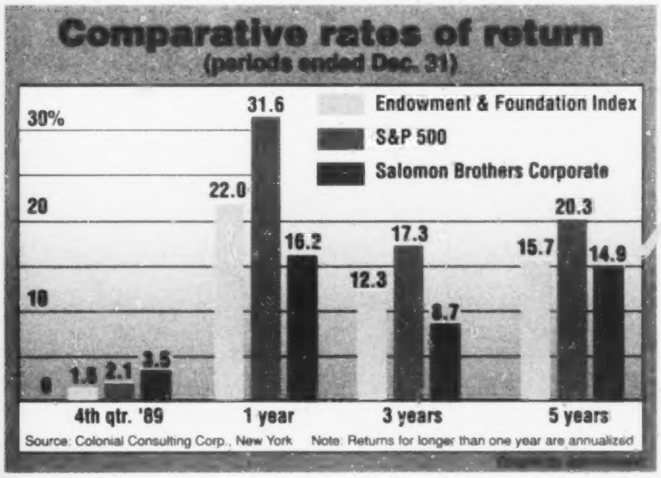
SEC to aid start of foreign markets

■The Securities and Exchange Commission is lending a hand to Eastern Bloc countries that want to set up securities markets.

Officials of the Soviet Union, Poland and Hungary recently have visited the SEC to review operations of American banking and securities markets and to discuss developing securities markets. More visits are expected.

In response, the SEC is forming an advisory committee on emerging securities markets in Eastern Europe and the Soviet Union. Among other tasks, members will help mobilize the U.S. securities industry to assist in the creation of markets and the training of market participants.

The committee will have about 24 members from government and the private sector. Members have not yet been named.



Source: Colonial Consulting Corp., New York Note: Returns for longer than one year are annualized

INVESTING

Funds trail indexes in 4th quarter

■Endowments and foundations returned 1.5% for the fourth quarter and 22% for all of 1989, Colonial Consulting Corp. says.

Foundations, which have a mean 60% equity allocation, posted the higher returns: 1.7% for the quarter and 23.7% for the year. Endowments, with a mean equity allocation of 56%, returned 1.3% for the quarter and 20.6% for the year.

The Standard & Poor's 500 Stock Index returned 2.1% in the quarter and 31.6% for the year, while the Shearson Lehman Hutton Government/Corporate Bond Index returned 3.6% in the quarter and 14.2% for the year.

The firm's data base is composed of 25 endowments and 22 foundations.

Carvel's Richard Ballantine.

PEOPLE

Job is one he'll lick his lips over

■Did Richard Ballantine's love of ice cream make him desert Wall Street and join Carvel Inc. as its new chief financial officer?

The ice cream aficionado swears that's not the reason he left the merchant banking and mergers and acquisitions departments at Salomon Brothers Inc. for the renowned Yonkers, N.Y., ice cream maker.

Ice cream, however, is "my one terrible vice," Mr. Ballantine confided. "I really do love ice cream. It's the one place I've worked where you can take something home with you at night."

His favorite flavor is vanilla. "I'm really simple," he says.

Mr. Ballantine, who was in charge of leveraged buy-out transactions at Salomon, said he was drawn to the idea of being part of a new management team.

Last November, Carvel was purchased by INVESTCORP, an international bank, and is in the process of assembling a new team and strategy. Carvel also named a new chairman and chief executive, Steven Fellingham, formerly president of Kentucky Fried Chicken USA.

CASH MANAGEMENT

Delivery standards could be costly

■ After years of consolidating lockbox networks, cash managers may be forced to add lockbox sites to cope with anticipated delays resulting from the revised mail delivery standards proposal.

The proposal is scheduled to be phased in starting this summer.

A survey by consultants Phoenix-Hecht found a 6.4-hour increase in the average time locally originated mail takes to reach New York City bank lockboxes.

The American Bankers Association has warned the revised delivery standards for several major lockbox cities could cost wholesale lockbox customers as much as $1 billion annually.

"If . . . mail arrives just three or four hours later than it does currently, the lockbox may miss check-clearing deadlines and consequently a full day's interest on funds represented by the checks," said Richard M. Nelson, a member of the ABA's postal service committee.

In a pilot program in the New York City area, cities in Westchester, Long Island, southern Connecticut and parts of New Jersey were changed from overnight to two-day delivery. One-day delivery time was retained within the city.

"This represents a 17% increase in mail time. We're in for some change in the lockbox business, if this is the first indication," said Jack Meckler, Phoenix-Hecht's president.

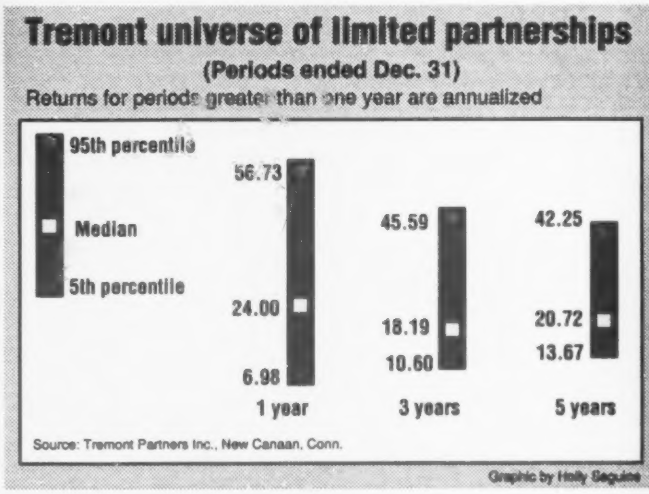
REAL ESTATE

Met fund to de-emphasize offices

■ Concerned about the future performance of office buildings, Metropolitan Life Insurance Co., New York, will slash the already relatively small percentage of assets in office buildings in its high-performing Tower Fund.

In 1985, the Tower Fund, an open-end, diversified, commingled real estate fund, had 28% of its assets in office buildings. Today the percentage is 24%, but in about 18 months the percentage should tumble to 17%, according to Michael J. Walker, assistant vice president of Metropolitan Life's pensions-real estate division. That 17% figure is less than half the industry standard for allocation to office buildings.

The money Metropolitan will take out of office investments will go to help boost the percentage investment in upper middle-class apartment buildings to about 23% from 10%. Some apartment vacancies are tight today, said Mr. Walker, and rents should increase.



Source: Tremont Partners Inc., New Canaan, Conn.

Graphic by Holly Seguine

FINANCING

Westinghouse unit enters Europe

■As aggressive as they've been in seeking to peddle their corporate finance skills in the United States, few of the financial services arms of big U.S. companies have staked a claim in Europe yet.

But Westinghouse International Capital Ltd. took the leap by opening an office in London, its first in Europe. Martin Rees, managing director, says the firm will offer comprehensive corporate financing for leveraged acquisitions, expansions and recapitalizations of middle-market companies in Europe.

Westinghouse also will provide senior and subordinate debt and equity for the acquisition and development of commercial real estate.

In its first deal in France, Westinghouse provided $31.3 million in senior debt, subordinate debt and equity financing in the acquisition of SICLI, France's leading fire protection company. Britain's NuSwift PLC sold SICLI to an investor group arranged by France's Rothschild & Cie Banque.

The deal marks one of the few times subordinate financing has been used in the acquisition of a French company. Westinghouse provided $17.4 million in subordinate debt.

PEOPLE

Ramirez teams with Hancock for global firm

■ Maria Fiorini Ramirez, formerly managing director and money market economist at Drexel Burnham Lambert Inc., is launching an international investment management and economic consulting firm under the umbrella of John Hancock Freedom Securities Corp., Boston.

The New York firm — Maria Ramirez Capital Consultants Inc. — will provide worldwide analyses and forecasts of credit markets and consulting services on global investment strategies.

Ms. Ramirez and John H. Goldsmith, president of JHFS, will form an investment advisory arm of Ramirez Capital offering global fixed-income and equity management to institutional clients.

As part of her relationship with John Hancock, Ms. Ramirez will become an officer of the Freedom Capital Management Corp. subsidiary with responsibility for reviewing the performance of the firm's international portfolios. She also will advise the sales forces of two other Hancock subsidiaries as well as the investment banking units of JHFS.

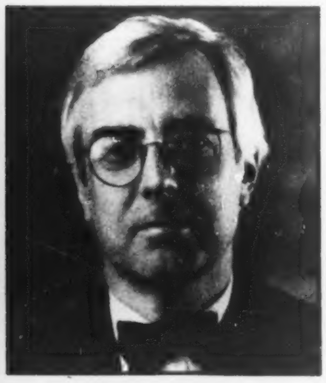
Maria Fiorini Ramirez, a former Drexel managing director and economist, is starting her own firm.

VENTURE CAPITAL

Funding misses technology firms

■ Venture capitalists' allocations to computer-related companies grew modestly in the fourth quarter, although the full-year total remained below 1988's level.

The venture community put $280 million into computer-related businesses in the fourth quarter, up 14% from the third quarter and 6% from the last quarter of 1988, according to Technologic Partners, New York.



Technologic's Richard Shaffer.

The full-year total reached $1.1 billion, 12% less than 1988's. Third-quarter funding was $252 million, a third less than in the same period in 1988.

These figures indicate a continuation of a down cycle in venture capital investing, said Richard A. Shaffer, Technologic founder and principal. Only the strongest high-tech companies are selling well when they go public, so fewer companies are going public fewer are receiving venture funding.

But technology stocks are rallying, he added.

REAL ESTATE

Equitable keeps 20% stake in tower

■ The Equitable Life Assurance Society of the United States sold for $520 million the former Paine Webber Building, 1285 Avenue of the Americas, New York, to a joint venture between Equitable and a subsidiary of Nippon Life of Tokyo.

NLI Properties, Nippon's subsidiary, has an 80% stake in the property and Equitable owns 20%, an Equitable spokesman said. Under the terms of the agreement, Equitable is the asset manager and will manage the investment for the joint venture partners.

The acquisition is the fifth real estate transaction between NLI Properties and Equitable.

The 1.7-million-square-foot, 38-story tower is part of the full-block Equitable Center complex that includes Equitable Tower.

INTERNATIONAL

Tucson to take overseas plunge

■ The $160 million Tucson, Ariz., Supplemental Retirement System has hired the Dallas office of William M. Mercer Meidinger Hansen Inc. to conduct a search for Tucson's first overseas manager.

The system plans to hire a fixed-income manager by the summer to run a $10 million portfolio, according to Tom Amparano, investment analyst. He said the system's board probably will extend the search to include an international equity manager, but has not yet done so.

An allocation study by Becker, Burke & Associates, Chicago, recommended the system put 5% to 10% of assets in both international fixed income and equities.

INVESTING

PRIM Board touts its 1989 results

■ The Pension Reserves Investment Management Board, Boston, announced its $2.9 billion trust returned 17.92% for calendar year 1989.

"This performance clearly indicates that our diversification, particularly into the international markets, is working to our best advantage," said Paul Quirk, executive director.

The firm's asset allocation at the end of 1989 had 38.3% of the

too ephemeral →

Reserves Investment Trust, a pool of pension assets of participating towns, counties and public agencies in Massachusetts.

FINANCING

Earnings dip to spark borrowings

■ A 6.3% drop in after-tax corporate profits last year did not stop companies from paying dividends. That means more financing activity lies ahead.

Despite the earnings dip, nonfinancial corporations still paid out 80% of after-tax profits in the form of dividends. Dividend payouts peaked at 92% in 1986.

"Despite weak earnings, corporations continued to pay dividends, and that makes it necessary to finance investment activities by borrowing," noted a report by Merrill Lynch Capital Markets.

But borrowing costs are already at a record level as a ratio of interest expense to cash flow. In 1989, interest payments absorbed 25.1% of the cash flow of non-financial corporations, vs. 22.7% during the recession in 1974.

"The interest-payment squeeze is likely to intensify as growth of cash flow slows and short-term interest rates move only slightly higher during the first half of 1990," the report said.

Cash flow margins dropped to 15.2% in 1989 from 18% in 1985, also nearing recession levels, and Merrill expects further narrowing in the first half of this year.

Profit margins have eroded since the end of 1984, but the decline worsened in 1989, when weaker demand and greater competition prevented corporations from raising prices enough to meet rising unit labor costs.

ESOPS

Stock plans, coverage escalate

■ Employee stock ownership plans boomed in 1989, with an estimated 830 such plans established to cover a record 1.9 million workers.

The National Center for Employee Ownership, Oakland, Calif., says the number of new plans was about 10% greater than in most previous years, but the number of new covered employees was about double. That's because about 20% of the plans were set up at large public companies, including Sears, Roebuck & Co.; Xerox Corp.; Mobil Corp.; and Procter & Gamble Co. Historically, public companies accounted for only about 10% of all ESOPs.

About half of public company ESOPs have been set up in companies facing the possibility of a takeover; the remainder of the plans augment the companies' employee benefits in a more tax-effective way, according to the center.

Cumulative growth of employee ownership plans

Year	Cumulative no. of plans	Cumulative no. of employees
1975	1,601	248,000
1976	2,331	503,000
1977	3,137	1,658,000
1978	4,028	2,800,000
1979	4,551	3,039,000
1980	5,009	4,048,000
1981	5,680	4,537,000
1982	6,082	4,745,000
1983	6,456	5,337,000
1984	6,904	6,576,000
1985	7,402	7,353,000
1986	8,046	7,860,000
1987	8,777	8,860,000
1988	9,407	9,630,000
1989	10,237	11,530,000

Source: National Center for Employee Ownership Inc., Oakland, Calif.

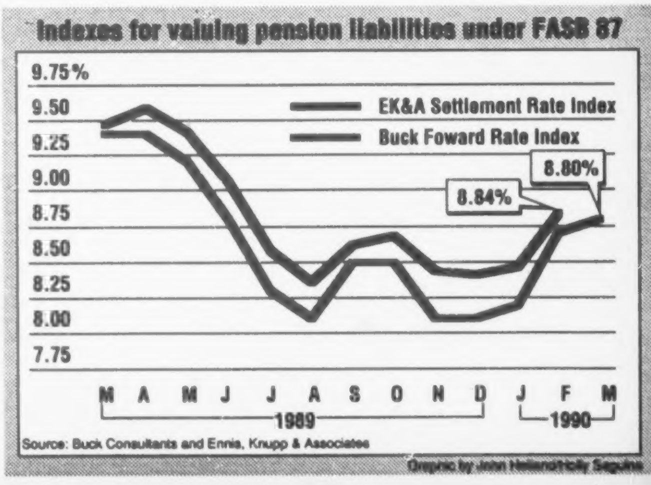
SOUTH AFRICA

Exits counted

■ Some 201 U.S. firms have left South Africa since Jan. 1, 1984, leaving 123 with direct investment or employees there, according to the Investor Responsibility Research Center, Washington.

The British and West German presence in South Africa dwarfs the United States', with 177 British and 142 West German companies operating there. The largest U.S. employer in South Africa, Caltex Petroleum Corp., comes in 21st among all foreign employers there.

Of the 154 U.S. companies that have left South Africa since the beginning of 1986, 74 retain non-equity links, such as licensing and distribution agreements.



Indexes for valuing pension liabilities under FASB 87

Source: Buck Consultants and Ennis, Knupp & Associates

UMWA facing benefit cash crunch

Trusts facing $450 million deficit

By Joel Chernoff

WASHINGTON — The United Mine Workers of America retiree health funds are digging a deep financial hole and may reach a combined deficit of $450 million to $600 million by 1993, according to a new study.

What's more, the report by the Employee Benefit Research Institute, Washington, says minimal cost-sharing provisions and broad definition of beneficiaries has contributed to the benefit funds' growing deficits. But medical benefits are not more generous than those of other employers, the study found.

Dallas Salisbury, EBRI's president, said a proposed transfer of up to $200 million in surplus assets from the 1950 UMWA Pension Trust to the 1950 and 1974 health trusts might alleviate the funds' short-term financing needs, but does not address long-term financing issues.

Congress "should not add to the problem by making a special exception" for one industry, Mr. Salisbury said.

The funds already are running in the red and have delayed payment of medical claims. Their situation is highly politicized, and the study's objectivity immediately came under attack.

"We didn't pay much attention to the report because it was financed by Pittston," said Liz Rose, press secretary for Sen. Jay Rockefeller, D-W.Va., who is pushing legislation allowing the transfer of the pension surplus.

She added the proposed transfer always was meant as a short-term solution to the trusts' financial crisis.

The EBRI study was financed by a $25,000 grant from Williams & Jensen, a Washington law firm that represented Pittston Co., Greenwich, Conn., in a bitter dispute with the UMWA that was resolved earlier this year. The grant was made last fall, before Pittston and the union settled the 11-month strike of the company.

Pittston's February 1988 withdrawal from an industry bargaining agreement — and from the financially strapped health trusts — triggered the UMWA's strike.

EBRI officials deny any bias in the report. They explained they were trying to lay out public policy issues, as Congress and the 11-member Coal Commission recently named by Labor Secretary Elizabeth Dole explore long-term financing issues for the funds. The Coal Commission, which is headed by former Labor Secretary William J. Usery, is scheduled to deliver its findings in October.

Stephanie Poe, EBRI's director of communications, explained the benefits research organization often accepts grants tied to specific research projects, but the group retains total independence in conducting its research and

See **UMWA crunch** *on page 26*

The EBRI report said Mine Worker health funds could face a deficit of at least $450 million in the next few years.

Flex plan change going smoothly

By Leonard J. Hollie

Many employers have overcome their initial anxiety about new rules governing flexible spending accounts but are monitoring their plans to see if changes may be needed.

"Section 89 had us worried to death that we would have to make changes just after we introduced the plan," said Martin Shields, Staten Island University Hospital's senior vice president for human resources. "But our plan was non-discriminatory to begin with and we have no regulatory headaches."

The New York hospital has 3,000 employees, 1,300 of whom are covered under the flexible benefit program first implemented in March 1989.

A flexible benefit plan is a program under Section 125 of the Internal Revenue Code that offers employees the choice between taxable benefits, including cash, and non-taxable benefits, such as health and life insurance and vacation pay. The plans have been very popular with employers and employees.

Flexible spending accounts, which are non-taxable, were affected by new regulations Jan. 1. Under the new rules, money to pay individual employee claims no longer was limited by the amount contributed to the employee spending plan; employers became responsible for the entire amount.

"Our first thought was that this rule change was going to put the university in the insurance business," said Frank Kellner, director of benefits administration for Johns Hopkins University, Baltimore. The 5-year-old flex plan covers 7,000 of the university's 10,000 employees, with 25% of those covered choosing a spending account.

After studying the university's turnover rates and the type of people who chose spending accounts, Mr. Kellner said he realized the amount of money for which the university would be liable was very small, and it was decided not to make any changes in the plan.

"We are going to monitor the plan closely this year to see how it comes out. If we find that we are susceptible to more risk, we would look at a plan adjustment," he said.

Employers also were concerned about the new rules' adverse affect on cash flow because claims payments cannot be limited to accrued account balances.

If an employee terminates employment early in the year after making a large claim against the account, for example, the employer or the plan would be liable for the costs.

The new regulations also strictly forbid employers from offsetting payment of early claims by adjusting the premium payment schedule based on the amount of claims incurred during the plan year.

"We had one employee who did file a large claim (and) then left," said Robert Taylor, director of compensation for Valero Energy Corp., San Antonio, Texas. "We couldn't withhold that amount from his last check, so we wrote and asked him to return the money, and he did."

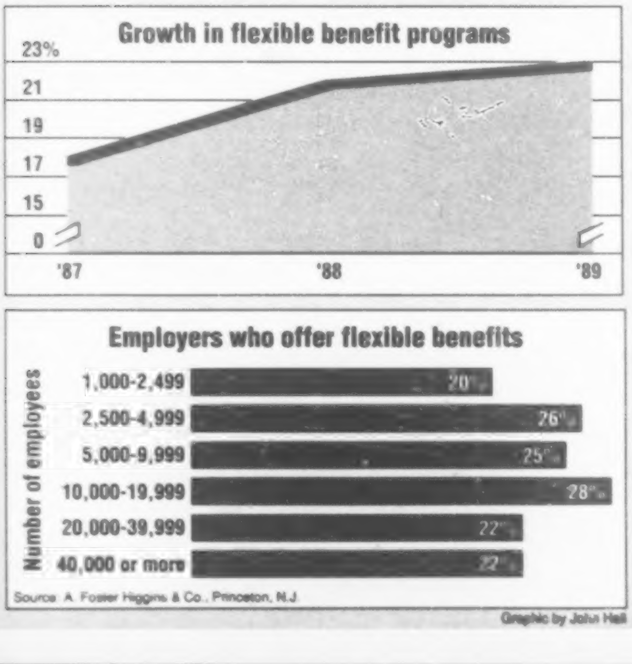
Of Valero's 2,000 employees, 1,500 are covered by the flex plan, with 60% of those covered opting for the spending account.

Mr. Taylor, who said he didn't think the rule change was a good idea, said the company decided not to alter the plan, keeping its $5,000 cap on reimbursement.

"We are betting that nothing bad will happen to us under the new rules," he added. "If it does,

See **Flexible** *on page 31*

Flex plans level off



Source: A. Foster Higgins & Co., Princeton, N.J.

Graphic by John Hall

Groups at odds over bill

By Hillary Durgin

WASHINGTON — Employers are rallying to head off legislation that would restore benefit plan participants' ability to sue under age-bias laws and increase substantially severance and other benefits costs.

Many employers are concerned that provisions of the legislation, S. 1511, would require them to restructure benefit packages. For example, it would prohibit employers from integrating retirement and severance benefits, with a limited exception. The increased cost burden could drive employers to cut severance, experts said.

"The great danger here is that if it looks like employers are going to have to provide duplicate benefits as a result of the . . . legislation, many more employers will simply be laid off without any severance pay, and older workers will rely on their pension benefits," said Mark Ugoretz, president of the ERISA Industry Committee, which represents 126 Fortune 200 companies.

The bill, called the Older Workers Benefit Protection Act, was introduced by Sen. Howard M. Metzenbaum, D-Ohio, and recently was approved by the Senate Labor and Human Resources Committee. It is expected to be taken up on the Senate floor before June.

The legislation is endorsed by the American Association of Retired Persons, the AFL-CIO, the United Auto Workers and the United Steelworkers of America. Business groups, such as ERIC and the Association of Private Pension and Welfare Plans, are working with Sens. Orrin G. Hatch, R-Utah, and Nancy L. Kassebaum, R-Kan., to develop alternative legislation before the bill hits the Senate floor.

The Metzenbaum bill would restore a 20-year-old standard set by the Age Discrimination in Employment Act of 1967. This rule requires employers to offer employees equal benefits unless age-based reductions are justified by the increased cost of providing benefits to older workers. The standard was overturned in a June 23 Supreme Court ruling, Public Employees Retirement System of Ohio vs. Betts (*Pensions & Investments*, July 10).

The proposed legislation would re-establish the equal cost rule. But employers believe it would go even further by barring integration of severance and pension benefits for workers who are eligible for retire-

See **Legislation** *on page 30*

Job-hoppers' benefits at risk

When workers change their jobs, they risk losing some of the value of their retirement income, especially if they take lump-sum payments and fail to reinvest the money properly.

Congress and the Bush administration are taking a hard look at this situation.

Several proposals have been advanced that would permit workers to take their retirement assets with them upon leaving a job, but also would require them to preserve the assets in a tax-qualified plan, such as an individual retirement account.

While much of the debate has focused on making pension benefits "portable," a critical aspect of the issues relates to preservation of benefits, according to some pension experts.

A new study by the Employee Benefit Research Institute, Washington, backs that assertion.

It reveals 34% of workers who took lump-sum payments in 1988 spent the entire amount, while only 11% placed the money in tax-qualified savings programs, annuities or other retirement vehicles.

Workers who made up the 11% tended to be older.

But assets of the 11% accounted for 22% of the $48 billion in lump-sum payments.

A larger grouping — 30% of the 8.5 million lump-sum recipients — put their money into "financial savings," which include such things as tax-qualified savings, regular savings and other financial instruments.

A yet larger group — 59% of the total — transferred the payments to financial savings, home purchase, mortgage payments or other debt payments.

Five percent used the money for some combination of consumption or savings.

The cost of not saving the distributions is substantial.

The average payout would grow from $6,800 per worker to $13,900 under a conservative investment strategy by age 65, or would more than triple to $19,800 under a more aggressive approach, based on historical rates of return.

Assistance is offered

A Buck Consultants Inc. survey found employers increasingly are providing pre-retirement guidance for their employees.

A survey of U.S. companies, government agencies and non-business organizations such as universities and foundations found 38% of 386 organizations offer pre-retirement planning programs.

An additional 31% plan to offer such programs in the future, according to the survey.

The primary reason given for not providing pre-retirement planning programs was the increased burden on staff time, the study found.

Long-term care eyed

As baby boomers head into their 40s, growing importance is being attached to long-term care.

Providing assistance with simple, daily activities is becoming a critical health-care issue, costing the United States about $56 billion in 1987, according to a study by the Washington-based Employee Benefit Research Institute.

Expenditures are bound to increase as the demand for long-term care rises and costs increase, according to the study by Robert M. Friedland, EBRI senior research associate.

Mr. Friedland is on leave to the Pepper Commission, which will address long-term care and other health issues.

Concern about providing long-term care also is building among the general public.

A recent poll conducted by Opinion Research Corp. for the American Council of Life Insurance, Washington, found 56% of those owning permanent life insurance said they probably would have chosen to pay 5% to 10% more to use the policy to cover long-term care expenses if such coverage had been available.

In addition, nearly 40% of those without permanent life insurance said they would be interested in purchasing insurance policies if they included long-term care protection.

Flexible

Continued from page 21

we can always go back and fix it, maybe putting a smaller cap on the plan."

Some employers already have felt the risk is too great to bear under the new plan and have lowered the caps on spending accounts to reduce exposure, said Mr. Kellner, who also is a board member of the Employer's Council on Flexible Compensation, a lobbying organization in Washington.

Ken Feltman, executive director of the employer's council, said most of the 420 members nationwide who have larger plans are adopting a wait-and-see strategy for 1990, while some of those members with smaller plans have reduced their caps.

Mr. Feltman said, however, "We are wondering whether 1990 is a good year to test the new plan since many employees may not be aware of their rights under the new rules. I think 1991 onward would be better, since employees will be more aware and more likely to put in a large claim early in the year."

Although some employers have learned to live with the new rules, reluctance from others may have contributed to a slowdown in the growth of flexible plans in 1989, according to new survey from A. Foster Higgins & Co., a Princeton, N.J.-based employee benefits consulting firm.

The nationwide study of nearly 1,000 employers found flexible benefit plans grew more slowly in 1989 than expected, with 23% of employers offering plans in 1989, vs. 22% in 1988. In 1987, 18% of employers offered such plans.

Despite limited growth, the report points out, employers continue to express strong support for flexible plans, more often citing such concerns as flex administration or communication requirements as a reason for not setting up flex programs. ■

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AT DEADLINE

UAL pilots cut profit-sharing

The United Airlines pilots' association will take up to $270 million in cuts in future contributions to a profit-sharing plan to help pay for its part of the proposed acquisition of UAL by employees.

The commitment doesn't involve the pilots' defined benefit fund, or any of the company's other two union's pension assets.

PacTel mulls in-house move

The $10.5 billion Pacific Telesis pension fund might begin managing a portion of its pension assets internally, said E. Douglas Taylor, executive director of investment management. The fund is interested in internal management mainly because of the potential cost saving.

Exxon audit sought

The Washington State Board of Investment is seeking an independent environmental audit of Exxon operations and facilities, noting more than $1 billion in oil spill costs has been charged against the company's 1989 earnings.

The board owns and actively manages 164,600 shares of Exxon stock and has an additional 925,000 shares in a mutual fund.

Cross-border trades backed

The International Councils of Securities Dealers and Self-Regulatory Associations endorsed common standards for clearance and settlement of securities transactions in all countries.

That action supports efforts by the Group of Thirty to promote the growth of cross-border equity trading by speeding the clearance and settlement process and reducing risk to participants.

Funds announce hires

The $85 million Enron Corp. pension fund hired Morgan Stanley Asset Management to run $8.5 million in international equities in its first overseas commitment, to be funded from cash flow.

The $180 million EG&G Inc. savings plan has invested about $35 million in the Putnam Cos.' Guaranteed Horizon Trusts. The assets came from internally managed GICs; GICs still comprise 75% of the savings plan.

Separately, EG&G's $320 million pension fund invested about $20 million total with two funds of JMB Institutional Realty and one offered by Lehndorff & Babson Real Estate Counsel. The move triples the fund's realty exposure to 15%.

Stock lending meeting set

U.S. banking representatives and Labor Department officials will meet April 25 to discuss the bankers' request to change four key constraints on foreign stock lending by U.S. corporate pension funds. The Labor Department tentatively rejected the proposals in January, but invited more discussion on the matter.

Massachusetts enters takeover fray

Bill would mandate classified boards

By Hillary Durgin

BOSTON — In yet another state's swipe at shareholder rights, the Massachusetts Legislature is poised to pass a bill that would virtually bar takeovers achieved by ousting management through an annual proxy vote.

The bill would require all Massachusetts companies to have "classified boards," which allow only one-third of a company's directors to be re-elected annually. An acquiring company would have to wait at least two years before gaining a majority on the board sympathetic to the takeover. Also, the bill would permit directors to opt out of the classified board provision, but would deny that right to shareholders.

No other state has a law mandating classified boards, and while some states permit them, shareholders have the right to vote on them.

The Massachusetts bill is fueling institutional investors' call for federal regulators to halt the piecemeal enactment of state laws they say are trampling shareholder rights.

The Massachusetts bill follows close on the heels of a heated debate over a pending Pennsylvania bill that would require companies that engage in an unsuccessful takeover to disgorge any short-term gains to the target company. The Pennsylvania bill also has an amendment that would make proxy fights extremely expensive for shareholders.

"My view is that the impact of (the Massachusetts) bill is nothing less than the partial nationalization of Massachusetts business corporations," Nell Minow, general counsel for Institutional Shareholder Services Inc., Washington, said in testimony before a hearing of the state's Senate Commerce and Labor Committee last week.

"These directors become the absolute rulers of the enterprise for a period of at least two years. They cannot be removed, they are accountable to no one, they have unfettered control of the corporation's assets," Ms. Minow said.

The Massachusetts bill, H. 5556, was drafted in response to the March 29, $1.6 billion hostile takeover bid for Norton Co., a Worcester, Mass., abrasives manufacturer, by London-based BTR PLC. The British conglomerate has said it would wage a proxy battle at Norton's April 26 annual meeting. If the legislation is passed, BTR would be unable to gain the two-thirds majority on the board necessary to oust Nor-

See **Takeover** *on page 35*

GENERAL MOTORS

Institutional investors will be closely watching General Motors Corp. and Robert Stempel, its new chairman, for signs of a turnaround.

'90 proxy victories leave key questions

By Marcia Parker

Analysis

The conclusion of two of the most significant proxy fights of the season — at Lockheed Corp. and Xtra Inc. — and a changing of the guard at General Motors Corp. raise a key question: How will institutional investors react to whatever changes management masterminds to rejuvenate the three struggling companies?

All three companies have performed poorly, and their top executives have been criticized for mismanagement. New strategic plans, some still being developed, will have to be put to the test. Whether institutional investors will stick with them depends on results.

Lockheed's management, led by Chairman Daniel Tellep, and the new chieftains of Xtra Inc., led by President Lewis Rubin, both owe their jobs largely to institutional investors. Robert Stempel, newly named successor to GM Chairman Roger Smith, also will face institutional shareholder pressure to bolster the auto company's lackluster performance.

Institutional investors, who have seen the value of their holdings in these three companies plummet or stagnate at best, vow to keep the pressure on.

Lockheed's profitability problems are aggravated by negative defense industry trends. Analysts say profitability can be improved and assets better managed, but it will take tough measures. Executives predict a strong earnings rebound in 1990, continued improvement down the road and no write-offs. Whether they can deliver is another question.

Also uncertain is the role in the restructuring of three as-yet unnamed directors. Their appointments will be controlled by institutional investors, who won that concession from management in exchange for their support in the proxy battle.

Institutional shareholders who played a key role in the proxy fight — including the California Public Employees' Retirement System, the New York City Employees' Retirement System and the Florida State Board of Administration — are making sug-

See **Reaction** *on page 32*

JMB gets seat on Federated's committee

By Steve Hemmerick

JMB Institutional Realty Corp., Chicago, seeking to protect the financial interests of its clients that own regional malls through JMB, has acquired a seat on the unsecured creditors committee for Federated Stores Inc.

Federated Stores — formerly Campeau (U.S.) and the holding company for the Federated Department Stores Inc. and Allied Corp. subsidiaries of the ailing Toronto-based retailing giant Campeau Corp. — filed for protection from creditors in January under Chapter 11 of the Federal Bankruptcy Code. Both department store chains have stores in regional malls managed by JMB for pension and endowment funds.

An unsecured creditors' committee is one of several committees that can make its opinions known to a judge deciding the outcome of a Chapter 11 reorganization.

Real estate consultants and advisers say Campeau's problems might affect the values or income of retail malls where Campeau stores are located.

Through its group trusts and Cadillac Fairview holdings, JMB manages and has ownership interest on behalf of its clients in 12 malls in which Campeau's stores operate.

The extent of JMB's own corporate interests in Campeau isn't known. Last July, however, prior to the Chapter 11 filings, Campeau officials announced JMB Realty Corp., an affiliate of JMB Institutional, and Campeau had reached an agreement on six new joint ventures that involved opening a number of new department

See **JMB** *on page 33*

NEWS DIGEST

Real estate consultant Stephen Roulac has turned his bicycling avocation into a business venture. Page 6.

A Virginia law requiring public funds to disclose investment-related information has been diluted significantly from its original intent. Page 28.

Pan Am World Airways, for the sixth time in 10 years, is seeking permission from the Internal Revenue Service to delay its pension contribution. Page 35.

SPECIAL REPORT: PROXIES 1990

The proxy voting system in the U.S. and abroad is under fire from both shareholders and government leaders as institutional investors' clout — buoyed by several early 1990 victories — is beginning to be felt. Page 19.

FINANCING

With traditional refinancing sources drying up, investment banks are turning to institutional investors in the private placement market to buy bridge loans. Page 3.

INTERNATIONAL

A record $20 billion is expected to be pumped into international investing by U.S. institutions despite recent slides in many foreign markets. Page 2.

West German companies' use of restricted shareholder voting is coming under pressure. Page 19.

REAL ESTATE

JMB Institutional Realty Corp. has secured a spot on the unsecured creditors' committee of Federated Stores to protect its interests and those of its clients. Page 1.

California Public Employees' stake in Santa Fe Pacific Realty gives it access to major developments. Page 3.

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International alert

Questionnaires for *Pensions & Investments'* annual directory of international and global investment advisers were mailed April 10. The deadline for inclusion in the directory, to be published June 25, is May 13. If you have accounts invested overseas and have not received a questionnaire, contact Christine Philip at (312) 649-5217.

Bargain hunters stalk junk market

By Marlene Givant Star

A few pension funds are entering the high-yield market for the first time or increasing existing commitments to take advantage of what they consider irresistibly low prices.

Like a punch-drunk boxer, the public junk bond market is slowly regaining its footing: The riskier zero-coupon sector is firming; high-yield mutual funds are seeing cash inflows for the first time in months; and equity capital is more attractive to speculative-grade companies than debt.

The private high-yield market also is strengthening, as evidenced by an increase in commitments to midsize "story deals" — or situations needing detailed explanation.

This year, at least three pension funds have entered the high-yield market for the first time. The trio hired Delaware Investment Advisers, Philadelphia, which manages $1.75 billion in high-yield bond investments for institutions, as well as a $600 million junk bond mutual fund. And six of the firm's existing clients, including General Motors Corp., funded their previous commitments this year.

In addition, the $10.5 billion Pacific Telesis Group pension fund, San Francisco, increased its commitment to junk bonds at the end of 1989 after fortuitously cutting back in the spring.

"High yield as a strategy has really had its rewards for us in the past four to five years," said E. Douglas Taylor, executive director-investment management at PacTel. "We thought the market break in the fourth quarter was a common overreaction. It caused us to raise our commitment at year end," by increasing the size of existing managers' accounts.

Mr. Taylor described the managers' performance as stellar, but declined to name the firms. Last year, the fund's high-yield accounts "did a heck of a lot better than the high-yield market. This year hasn't been bad."

Many believe the market is irrationally depressing the prices of big-name credits that have never had trouble making their coupon payments.

"No one's going to stop wearing underwear," said J. Michael Pokorney, vice president and senior portfolio manager of Delaware, noting that companies like Playtex Apparel Inc., American Standard Inc., Anchor Glass Container Corp., and Chiquita Brands Inc. are selling at a bargain 80 cents on the dollar.

To be sure, the market is still fragile. Brokerage firms are expected to unload their high-yield inventories soon, the new issue calendar is virtually empty, the secondary market is extremely thin and interest rates remain at prohibitively high levels for many issuers.

But junk prices can react strongly to even a small increase in investor demand because of the dearth of high-yield paper. "Technical factors are positive, and the recent strength in zeroes, a leading indicator for our market, suggests a sustained trend of improvement," noted a high-yield market commentary report from Donaldson, Lufkin & Jenrette Securities Corp., New York.

"The market's beginning to get its feet back on the ground. Because of that, people tend to look for incremental yield (on stronger credits) as an outgrowth of the market feeling a little better," said Steven Shenfeld, a high-yield bond trader at DLJ.

Debt buybacks by speculative-grade companies also could boost market sentiment. Brian Doyle, director-high-yield bond research

See **Junk market** *on page 35*

Global arena still attracting U.S. funds

By Margaret Price

Undeterred by the Japa market's near free fall, c recent slides in some majo European markets, U.S pension funds seem inter on increasing their overa foreign investments thi year.

A recent survey by Inter Sec Research Corp., Stam ford, Conn., predicte 1990's net cash inflow int international investment

See **Overseas** *on page 3*

FT-Actuaries World Indexes

Dec. 29, 1989-April 9, 199

	Tot ret (in U.S. $
Australia	−7.91
Austria	53.84
Belgium	−3.80
Canada	−6.37
Denmark	4.37
Finland	2.74
France	4.73
Hong Kong	5.80
Ireland	3.94
Italy	1.60
Japan	−29.85
Malaysia	−8.35
Mexico	20.35
Netherlands	−1.94
New Zealand	−12.53
Norway	16.43
Singapore	5.20
South Africa	−4.29
Spain	−12.35
Sweden	−5.48
Switzerland	−1.62
United Kingdom	−5.36
United States	−2.66
West Germany	9.14

Source: The Financial Times Ltd.; Goldman, Sachs & Co. and County Nat West/Wood Mackenzie

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GIC meeting becomes hostile

Tempers flare in debate over value of active manageme

By Fred Williams

NEW ORLEANS — The bad blood that exists among participants in the guaranteed investment industry surfaced at a recent conference that was anything but sanguine.

Even the chairman of the event noted the sour atmosphere among plan sponsors, managers, consultants, banks and insurance companies. Ed Rennie, executive director-trust investment at Bell Atlantic Corp. and conference chairman, regularly attends conferences about the equity and bond markets, but said he had "never seen as much hostility among participants as I've seen at this one. It is a concern to me. When we disagree, we should disagree professionally; hostility has no place."

The hostility was particularly apparent in the discussion between a pension executive and a GIC manager over whether discretionary GIC managers add value to GIC portfolios.

The at-times acrimonious debate between Robert M. Hunkeler, manager of trust investments at CIBA-GEIGY Corp., Ardsley, N.Y., and David M. Perry, president of Certus Financial Corp., San Francisco, was easily the most controversial session of Institute for International search's fourth annual GIC S posium.

Mr. Hunkeler attacked cl

See **GIC debate** *on pa*

"It is ludicrous to think that a plan sponsor who looks at the market one to three times a year can do this as professionally and effectively as we do."

David Perry

"Our experience . . . has led us the conclusion that it is extremely unlikely a GIC manager will add va it is far more likely a GIC manager subtract value."

Robert Hun

California fund takes active role in realty firm

Officials expect significant returns

By Steve Hemmerick

The California Public Employees' Retirement System plans to be an active player in the strategic decisions made by a real estate company in which it now owns a 20% interest.

In addition, officials expect the investment returns from the fund's stake in Santa Fe Pacific Realty Corp. to be significantly more than the 5% real return they expect from the system's average real estate holdings.

The $56 billion fund's ownership interest in the San Francisco-based real estate developer is its largest percentage ownership in any company.

The deal — completed in December — cost the fund $400 million, and included two seats on the company's board of directors. Officials from JMB Institutional Realty Corp., Chicago, which suggested the deal to the California pension fund, will serve as the fund's representatives on the board.

"It's a unique investment," said DeWitt Bowman, chief investment officer for California Employees.

"We do really feel that as a minority partner, along with the other minority partners, we have a great deal of influence that can be made on strategy and business policy of the company," said Roger Franz, real estate investment officer for the fund.

Other shareholders with large stakes are Itel Corp., which has a 17% interest, and Olympia & York Developments Ltd., a 20% stake. Real estate mogul Sam Zell has a 25% interest in Itel.

Through the deal, the pension fund has gained access to earnings from some of the most significant real estate development deals in California.

They include:

- Development of the Mission Bay project in San Francisco, the largest development in the city's history. Santa Fe will develop industrial, office and housing at an estimated cost of $2 billion. The firm also will pay most of the $231 million need for roads, parks, community facilities and toxic cleanup. An estimated 16,000 people will live there and 23,000 will work there when Mission Bay is complete.
- Acquisition of the 51-year-old Union Station on a 48-acre site in downtown Los Angeles, slated to be the hub of the city's multibillion dollar subway and light rail system. Santa Fe also acquired land surrounding the station to build offices and retail.
- Development of a hotel, office and retail complex on 17 acres surrounding the San Diego train depot. Santa Fe is spending about $1 billion there.
- Development of a $25 million, 400-unit apartment complex in San Diego, across the street from its new, $40 million Embassy Suites hotel in downtown.

Santa Fe's holdings include Los Angeles' Union Station, which will be the hub of the subway system.

With 2 million acres in 13 states, the company has enough land to build projects for 20 years, Mr. Franz said.

In addition to the $400 million paid for the 20% stake, the fund loaned the company $75 million. That loan could be paid back in the form of an even greater equity interest.

Mr. Franz said one reason the fund invested in the deal is i needs a steady stream of prime real estate projects.

Santa Fe Pacific Realty, a subsidiary of Santa Fe Pacific Corp in Chicago, is expected to be spur off in 1992. ■

Governments face $1 trillion tab

By Fred Williams

A proposal that state and local governments disclose the projected costs of post-retirement health care benefits for their employees could reveal liabilities in excess of $1 trillion.

Until now, most of the attention has been focused on corporate retiree medical liabilities, estimated between $200 billion and $2 trillion. But the Government Accounting Standards Board has issued a proposal that would require state and local governmental bodies to provide disclosures about their post-retirement benefits.

The disclosure ultimately could affect state credit ratings, some experts say. According to one actuary, state and local retiree health care liabilities could easily top $1 trillion, which will have to be paid by taxpayers.

Public officials contacted by *Pensions & Investments* refused to reveal the size of the liabilities for their plans.

The proposed standard, which would be effective for fiscal years after June 15, 1990, is similar to the Financial Accounting Standards Board Statement 81, which requires corporations to disclose in financial statements how medical benefits are being paid.

The GASB proposal would require that state and local governments disclose benefits provided, employees covered and employer obligations to contribute; a description of the statutory authority under which the benefits are provided; a description of the accounting and funding policies followed for the benefits; and the expenditures for those benefits recognized for the period.

The measure is seen as temporary while the GASB, the accounting standards body for government entities, works out a standard for accrual accounting for implementation in the late 1990s.

According to a research report prepared for the GASB by the staff of the National Association of State Auditors, Comptrollers and Treasurers, Louisville, Ky., most state and local governments offer retiree medical benefits, and a great majority finance the plans on a pay-as-you-go basis.

In a survey by the association, to which officials of 38 states responded, 22 said they offered retiree benefit plans. Of the 31 small cities responding, only four had retiree plans. Of the 16 large cities responding, however, 10 offer plans.

In addition, only one respondent to the entire survey indicated it was pre-funding retiree medical liabilities.

The association's report concluded "an accrual-based ap-

See **Liability** *on page 33*

Trying to bridge the gap

Investment banks turning to private market for refinancing

By Leonard J. Hollie

Investment banks' outstanding bridge loans

Firm	$ millions
First Boston	700
Merrill Lynch Capital Markets	600
Shearson Lehman Hutton	600
PaineWebber	300
Salomon Brothers	200
Bear Stearns	50
Morgan Stanley	41

Source: Standard & Poor's Corp. estimates

Squeezed out of traditional routes of refinancing bridge loans through commercial banks or with junk bonds, some investment banks are turning to the private market and tapping institutional investors. So far, however, only a few investors have bought the pitch.

Although GE Capital Corp. has taken the lead in buying almost $250 million in bridge loans from Kidder, Peabody & Co. Inc. — both firms are subsidiaries of General Electric Co. — large institutional investors are not yet convinced of the value of these investments.

Lisa Van Orden, a spokeswoman for GE Capital, said purchasing Kidder's bridge loans, "hasn't had an adverse effect on our business." But she said, the firm does not plan to buy bridge loans from other investment banks.

"The stumbling block for institutional investors is the (selling) price of these loans," said David Bullett, vice president for the Teachers Insurance and Annuity Association, New York. Mr. Bullett said he is aware investment banks are turning to the private placement market for financing, but the one deal he has seen had an excessive price tag. He declined to elaborate.

"There will have to be some concessions made in lowering the price of these loans. They are priced at the same levels (when) the deals were struck six to nine months ago," he said. "That doesn't make much sense in light of the present economic environment."

With the public markets hard to access, analysts said investment banks are putting greater emphasis on finding private placement vehicles to raise money instead of committing their own capital. Standard & Poor's Corp., New York, estimates top brokerage houses that make bridge loans have about $2.5 billion total in outstanding loans on their books.

Perrin H. Long, securities analyst for Lipper Analytical Securities Corp., New York, said he's seeing more investment banks turn to the private market. "This is an avenue for them, though they are being secretive about doing it," he said.

Bridge loans usually are retired through permanent bank financing, junk-bond issuance and private financing with institutional investors. The loans also can be retired through the sale of the company's assets.

Analysts believe brokerage houses are being squeezed to refinance bridge loans, especially those that hold sizable amounts of junk bonds, because they are experiencing weak earnings.

"These firms no longer have ready access to the junk bond investor due to (Drexel Burnham Lambert Inc.'s) collapse, and that makes it hard to liquidate their bridge positions," said Jeffrey Bowman, vice president at Standard & Poor's. "Private placements have become attractive to them. It's starting to happen. There is one firm that is doing it now," said Mr. Bowman who declined to name the firm.

Mr. Bowman said some of the reasons for the security industry's depressed earnings include a slowdown in mergers and acquisitions, underwriting volume and institutional and retail buying.

Not surprisingly, although some brokerage firms said they will consider the private placement market as an alternative, many have been reluctant to talk about their refinancing strategy. The firms are using a variety of techniques to reduce their bridge loan exposure.

In March, First Boston Corp. sold its Swiss parent company, CS Holding, more than half of its $450 million bridge loan to Ohio Mattress Co., and analysts said First Boston plans to help corporate clients sell junk bonds in the private placement market to raise funds to pay off two other bridge loans to American Medical Inter-

See **Bridge** *on page 3*

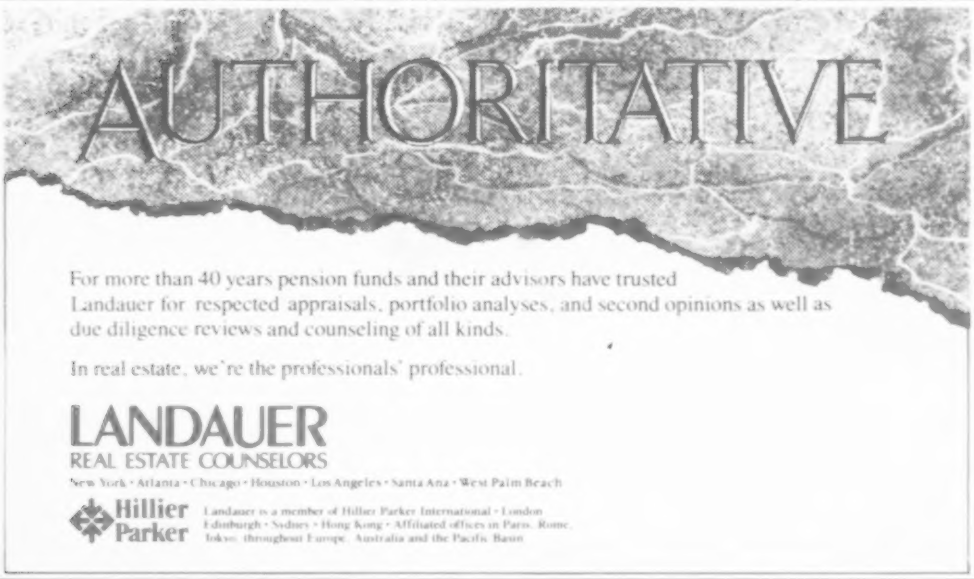
SOFTWARE

System marketing goes overseas

■ Information Systems of America Inc., Atlanta, and Spain's Entel S.A. have formed a joint venture to market ISA's Investment Management and Accounting software system in Spain and Portugal, both fast growing markets.

The ISA system is marketed as PRISM in the United States and is among the leading IBM mainframe-based systems offering multicurrency capabilities to international money managers.

Entel, an affiliate of the Spanish telephone company, is a leading developer of hardware and software. A subsidiary of United Telecom, ISA develops, markets and supports IBM mainframe investment management and accounting systems for the global financial services industry.



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LBOS

Junk bond fallout imperils banks

■ The leveraged buy-out loans of U.S. banks could be hurt by the collapse of the junk bond market, an executive of Moody's Investors Service warned.

In a recent speech in New York, Christopher Mahoney told a group of bank and financial analysts the markets' harsher attitude toward leverage will make it more difficult for cash-strapped LBO companies to refinance borrowings or to sell assets to meet obligations.

He said the rating agency is reviewing banks' portfolio exposure to LBOs and highly leveraged transactions. "The bottom line is that we are expecting LBO problems to rise substantially," Mr. Mahoney said. "Since LBO loans are generally senior and secured, the actual loss experience should be modest."

Money center banks' LBO/HLT exposure ($ billions)

	Total exposure	
	1988	1989
Chase	6.0	6.9
Citicorp	10.0	13.4
Bankers Trust	5.6	6.9
B of A	2.0	2.3**
Manufacturers	5.1	5.3
Chemical	3.1	4.9
J.P. Morgan	1.0	1.7**
First Chicago	1.4	4.1
Continental	1.7	5.0

**3rd quarter 1989 data

Source: Moody's Investors Service

Note: Total exposure includes outstandings, commitments, subordinated debt outstandings and equity investments.

REAL ESTATE

To buy or not to buy is the question

■ Five officers from multibillion-dollar pension plans will disclose their opinions at a New York University conference May 13-15 on whether it is a good time to invest in real estate.

The five are John W. MacMurray, senior director-pension administration, RJR Nabisco Inc.; Louise Moloney, financial analyst, U.S. Steel & Carnegie Pension Fund; James Peterson, director of real estate and alternative investments, IBM Corp.; Joseph Russo, division manager of real estate investments, AT&T; and Thomas Thompson, director of real estate investments, American Information Technologies Corp.

DeWitt F. Bowman, chief investment officer for the California Public Employees' Retirement System, will moderate the panel discussion.

The conference — NYU's first on pension funds and real estate — also will concentrate on employing modern portfolio theories in real estate.

Conference speakers on that subject include Susan Hudson-Wilson, vice president, Aldrich, Eastman & Waltch; Nori Gerardo, managing director, Pension Consulting Alliance; David McMillan, second vice present-investments, Aetna Realty Investors; and Charles W. Wurtzebach, vice president-portfolio management, Prudential Realty Group, Newark, N.J. Moderator for the MPT panel will be Michael Gilberto, vice president, Salomon Brothers Inc., New York.

HEDGING

Chase looks to score in derivatives

■ Chief financial officers and treasurers will turn to new derivative securities to hedge non-interest rate risks such as raw materials, inflation and cost-of-living increases.

"Corporate America is realizing the volatility isn't over. The static debt structure of the 1980s will be replaced in the 1990s by a dynamic debt structure . . . that can hedge operating risks," said Walter J. Mullen, the newly named managing director in charge of debt and derivatives transactions at Chase Securities Inc. in New York.

Chase Securities, the securities arm of The Chase Manhattan Bank, aims to make its mark by capitalizing on its expertise with derivatives such as interest rate swaps, caps and floors. It will focus on underwriting and selling derivative-linked securities for its top-tier corporate clients. Commercial banks long have had an advantage in the derivatives area.

Mr. Mullen recently joined Chase from Security Pacific Merchant Bank, where he managed global interest rate and currency risk. Paul Sclafani, who just came on board from Nomura Securities Inc., is managing director-investor services who heads up the institutional sales effort.

Paul Sclafani

Walter J. Mullen

Shareholder agenda: limited but powerful

By Robert A.G. Monks

As stocks are consolidated more and more in the accounts of enormous institutional investors, these predominant shareholders are both large enough to find active participation in ownership issues a wise investment, as well as obligated as fiduciaries to become involved. This is why it is essential to be very clear about the agenda for shareholder involvement.

Management's accountability to shareholders is what keeps it focused on productivity and competitiveness. Without accountability, there is nothing to prevent management from diverting corporate assets to its own benefit. But if management is too accountable, productivity and competitiveness can suffer. We have seen management held hostage by "takeover entrepreneurs," investors with short-term perspective whose involvement provides perverse incentives for management to take actions contrary to long-term interests of the company and shareholders.

Shareholders' most important function is the right to act on serious problems, such as in the case of an incompetent or corrupt management that must be thrown out, or in a contest for control, where one side or the other must be supported, or in the need for major restructuring.

The first and most important element of the ownership agenda, then, is protection of core process rights, to protect the right to act when necessary. Thus, shareholders must resist proposals to stagger election of directors, because this dilutes the power of stockholders to change the board of directors annually. By delaying the capacity of a majority of owners to elect a majority of directors, the staggered board structure represents an unacceptable reduction of the essential characteristic — and the value — of stock. Similarly, the authorization of several classes of stock having disproportionate voting rights dilutes the intrinsic rights of the ordinary common stockholder and infringes on their dividend rights as well. Champion International Corp. and Polaroid Corp. are two of the recent examples of this special treatment for certain investors. Common stockholders are in this respect comparable to citizens of a constitutional democracy; their status and the value of their franchise are a function of their vigilance.

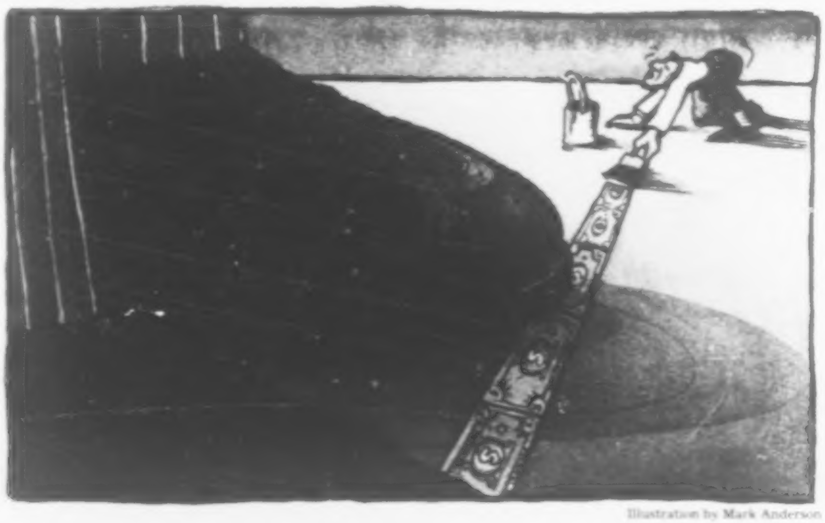

Illustration by Mark Anderson

Vigilant protection of the vote is not enough. Harvard Business School Professor Jay Lorsch in his "Pawns or Potentates? The Reality of America's Corporate Boards" (200 pages, Harvard Business School Press, 1989) trenchantly demonstrates that boards of directors in reality are just another corporate department governed by the chief executive officer rather than an independent body seriously and effectively committed to long-term enhancement of ownership values.

State legislatures' endorsement of anti-takeover measures, the latest exemplified by the still-pending Pennsylvania Senate Bill 1310, obscures and dilutes the obligation of directors to manage the corporation as fiduciaries for the shareholders. As a result, it represents a dangerous threat to the integrity of our business system.

Shareholders should therefore include in their agenda in regard to the formation of boards of directors: nominating committees consisting entirely of outside directors (disqualifying affiliated outsiders, like the corporation's attorney and banker), a chairman who is someone other than the corporate chief executive officer, and a national registry of competent, independent persons willing to serve along the lines of the highly successful British organization, Promotion of Non-Executive Directors, a clearinghouse funded by institutional investors to provide candidates for director positions.

Benjamin Graham and David Dodd, in the first edition of their "Security Analysis" (1934) noted, "The choice of a common stock is a single act, its ownership is a continuing process." In their view, it was inevitable that the interests of stockholders and management would conflict at certain points and that shareholders should expect to be involved to protect their values. The agenda was defined by this inevitable conflict, which would keep it a creative tension, a system of checks and balances. The shareholder agenda should be strictly limited to these items. Owners should not be involved in operating matters.

The improved performance of Honeywell Inc. following the unprecedented defeat of "management entrenchment" proposals at its annual meeting last year provides compelling evidence that good governance is good value. ■

Robert A.G. Monks is president of Institutional Shareholder Services Inc., Washington.

Legislative disregard of investors' rights

By Robert C. Pozen

The Pennsylvania Legislature is poised to pass a new form of anti-takeover statute that strikes at the heart of corporate democracy.

The proposed statute, probably set for a vote this week, would set a dangerous precedent by threatening any shareholder who tries to persuade others to vote against a proposal by corporate management.

The Pennsylvania statute is part of a trend that has been spreading through state legislatures like a virus, a virus that in its most virulent form could kill free speech among shareholders. This "anti-takeover virus" has been spreading via the copier machine: Any takeover restriction passed in one state has been quickly copied by other states.

The states are attempting to fill the void left by the federal government's failure to respond to enormous changes in the field of mergers and acquisitions. While Congress sits idly by, states such as Pennsylvania are drastically restructuring the governance process of companies traded in the national and international markets. More than 30 states have adopted anti-takeover statutes, often in great haste at the request of a local company facing an unwelcome shareholder.

State statutes typically prohibit anyone from acquiring more than 20% of the voting stock of a locally incorporated firm without prior approval of its board. For the first time, however, the Pennsylvania law also would penalize anyone who obtains proxies for more than 20% of a company's shares. The proposed penalty is severe: handing over to the company all profits from the sale of the shares within 18 months.

For example, suppose a Pennsylvania company asks shareholders to approve a merger that seems imprudent or wasteful to an institutional investor owning 4% of the company's stock. If the institutional investor persuades owners of 17% more of the stock to vote together with it against the merger, the institutional investor would forfeit all profits on sale of that stock within the next 18 months.

Or, suppose an individual owns 15% of the stock of a Pennsylvania company and one of the company's directors is indicted for bribery. If the individual persuades owners of 6% more of the stock to vote with him against the indicted director, the individual would lose all profits on the sale of that stock within the next 18 months.

In both cases, the communication among shareholders would simply be truthful expressions of opinion, disseminated in accordance with the Securities and Exchange Commission's proxy rules. This is the essence of corporate democracy. Nevertheless, such truthful speech would be subjected to the chilling effect of a severe penalty.

What justification is there for this restriction on free speech? The sponsors of the Pennsylvania statute do not argue the statute is needed to prevent corporate raiders from taking over companies through leveraged buy-outs or bust-up mergers. Pennsylvania already has a statute that prevents anyone, without the directors' approval, from buying more than 20% of a Pennsylvania company's stock and then effecting any type of transaction with or on behalf of that company.

Instead, the sponsors argue the new restriction on proxy solicitations is needed to prevent someone from buying less than 20% of a company's stock and then extracting greenmail — forcing the company to buy back a large block of stock at a higher than market price.

If greenmail is a problem, however, Pennsylvania could pass a narrow statute that prevents a company from purchasing its shares at a premium from one shareholder unless an offer is made to all shareholders. New York has such a statute.

The real reason for the Pennsylvania bill is that local companies are worried about outsiders acquiring significant blocks of their shares. As a result of the fears of business and labor groups, the bill sailed through the Pennsylvania Senate without careful analysis, and recently passed the House without the exemptive relief sought by institutional investors. Pension funds and other institutional investors now will be pushing for such relief in the process of reconciling the House and Senate versions of the bill.

It is easy to understand the fears of Pennsylvania managers and employees about the corporate restructurings that have occurred in the past decade. Statutes such as the one proposed in Pennsylvania, however, are irrational responses to these fears. Many corporate restructurings are related to fundamental forces beyond the control of any state legislature — dramatic changes in technology and the competitive position of the United States.

While there are abuses in the takeover process that need to be corrected, these reforms should be made by Congress. Only Congress can balance the interests of incumbent managers and local employees against the interests of national investors and international competitors. Concerned as they must be with tax revenue and employment within their state's borders, state legislators should not be setting the ground rules for the governance of U.S. corporations. ■

Robert C. Pozen is general counsel of Boston-based FMR Corp. and a managing director of its Fidelity Investments.

LETTERS

Southland Corp. confusion

■ In "Distressed opportunities plentiful in the '90s" (March 5), I listed "Southland" as being in default, causing confusion with companies with similar names. It is Southland Financial that is in default.

Martin D. Sass

M.D. Sass Investors Services
New York

Firm in wrong asset group

■ Your Scorecard report (Feb. 5) incorrectly listed Fischer, Francis, Trees & Watts Inc. as a balanced manager. FFTW exclusively manages fixed-income securities. Our net new fixed-income business for 1989 was $1.18 billion.

Cecilia Murphy Baron

Fischer, Francis, Trees & Watts
New York

Editor's note: The questionnaire received from FFTW listed all assets as "balanced."

GIC debate

Continued from page 2

by GIC managers that they add value to GIC portfolios.

He said CIBA-GEIGY recently terminated its outside GIC manager, returning its $400 million in GIC assets to internal management.

Mr. Hunkeler declined to name the terminated manager, which was hired in 1987. But in the 1990 Money Market Directory, State Street Bank and Trust Co., Boston, was listed as GIC/BIC manager for CIBA-GEIGY's $500 million 401(k) plan. "All the guaranteed assets are in the 401(k) plan."

"Our experience and research over the last three years has led us to the conclusion that it is extremely unlikely a GIC manager will add value; it is far more likely a GIC manager will subtract value," Mr. Hunkeler said, firing the opening shot of the debate, which at times degenerated into name-calling by Mr. Perry.

Mr. Hunkeler also disputed claims by some GIC managers that external managers relieve plan sponsors of fiduciary responsibility and that pension fund staffs cannot manage GICs as well as external managers.

And he hit hard at what he classified as excessive fees charged by GIC managers for their services.

Mr. Perry said GIC managers add value to the portfolios through independent credit quality research and support, "market access," central administrative functions and employee communications. He said they also share fiduciary responsibility.

GIC managers add value, he said, by "giving professional, full-time support to a business that is immensely complex."

Discretionary GIC managers have have captured 15% to 20% of the estimated $175 billion to $200 billion GIC market, but most GICs are managed internally.

Mr. Hunkeler said CIBA-GEIGY and other larger plans have made a commitment to internal GIC investment management staff and resources. "Outside managers may add value if the plan is small and unsophisticated and if you don't look at the fees they charge, or if you just want to delegate administrative responsibility. . . . We firmly believe the claims for hiring outside (GIC) managers are unsubstantiated in the market and unproven."

Mr. Hunkeler didn't detail his fund's experience, but said he came to the conclusion that a plan sponsor can do most of the manager's job — credit research, underwriting risks, contract negotiation and execution — as well as or better than the manager, without paying the management fee.

Mr. Hunkeler said CIBA-GEIGY was being assessed about $400,000 in fees annually for managing its GIC fund.

(One consultant, however, later said that fee level — about 10 basis points — is well below the industry average. Kim McCarrell, consultant with the Wyatt Asset Services, Portland, Ore., said GIC management fees range from 20 to 50 basis points or more on assets under management.)

Mr. Perry said there are "degrees of effectiveness, and it comes down to the fact it is participant money and the performance of the fund is still an elusive endeavor. Nevertheless, we have 17 full-time people who do nothing but GIC work. Three of them measure the quality of issuers; we subscribe to all the rating information.

"We say, 'Do you want it done professionally or unprofessionally?' It is ludicrous to think that a plan sponsor who looks at the market one to three times a year can do this as professionally and effectively as we do."

Mr. Hunkeler said his fund carries between 10 and 30 contracts in its portfolio. He disputed Mr. Perry's claims that the manager's staff is somehow more attentive to contract provisions, credit quality and new products. "We have two people working on this, one plan and 30 contracts," he said. "Managers are looking at hundreds of contracts. How much time can the manager put in on individual contracts?"

Interviewed after the debate, he said, "Being able to mitigate underwriting risks is largely an understanding of cash flow. We feel the person sitting on top of cash flow, which is ourselves, is in the best and most effective position to decide which risks you would want to take." He added managers, "who don't know the cash flow, tend to create larger contract buffers which, in turn, reduce yields."

Mr. Perry said insurance carriers are more likely to contact GIC managers when they have special deals or above-market offerings than to go directly to plan sponsors. But Mr. Hunkeler characterized that claim as "pure bull," and received some unexpected support from the audience.

A representative from Metropolitan Life Insurance Co., New York, a major GIC issuer, stood to say insurance carriers do not contact "intermediaries" about special offerings. "I don't want anyone in this room to leave thinking that carriers do that," he said.

Mr. Perry said "the appeal of a GIC fund is its security, stability and lack of volatility. The fundamental reason GIC managers are hired is because plan sponsors don't want to see the blended yield of the fund go from 9% to 7%. The reasons we have been hired in the past is that the plan sponsor has concluded it is participant money, and (the sponsor isn't) going to staff up to do a professional job of managing the assets."

Mr. Hunkeler concluded by saying the question of hiring a GIC manager comes down to "a question of cost. Are you getting what you pay for? We concluded that you are not." ■

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Overseas

Continued from page 2

by U.S. pension funds should reach a record of $20 billion, and bring total international investments to some $105 billion.

Of that total, 85%, or $89.25 billion, would be in equities investments, and the remainder in fixed-income vehicles.

The outlook comes despite weaknesses in some key foreign stock markets, especially Japan's. Between Dec. 29 and April 9, the FT-Actuaries World Indexes fell 13.55% in total return in dollars, compared with a rise of 17.69% for all of 1989.

Japan's stock market has produced the shabbiest total return this year of the world's major markets. Others, including New Zealand, Australia and a number of European markets, also have faltered.

The dollar's rise certainly has added to the general malaise. Between Dec. 29 and April 9, the dollar advanced 9.91% against the Japanese yen and less than 1% against the deutsche mark. A higher dollar reduces the value of assets denominated in foreign currencies.

Of course, investors have noticed the double-barreled blowout from financial markets.

The $440 million pension fund of Wisconsin Electric Power Co., Milwaukee, made its first investments in the international arena in January. "Perhaps it may seem like an inappropriate time to get in because of the volatility of foreign markets, but this is long-term investing," said Richard Purucker, administrator-pension plans.

Wisconsin Electric chose State Street Bank and Trust Co., Boston, to manage $22 million in two commingled equity funds and instructed State Street to underweight the Japanese market by an undisclosed amount.

Nancy Lange, a vice president at InterSec, said some money managers wonder whether pension executives will repatriate their assets, but "if they're getting worried, they haven't told us about it. We haven't noticed any sign of worry yet."

Allan Emkin, managing director, Pension Consulting Alliance, Glendale, Calif., said he "can state unequivocally that none of the clients I'm dealing with is reconsidering (his or her) commitment to non-dollar securities as an asset class."

Indeed, some "are considering investing more assets in order to reach a previously established target," he said.

Robert C. Elliott, senior executive vice president, Bessemer Trust Co., New York, said he doesn't know of any clients saying, "Sell me out." In fact, some of Bessemer's clients in domestic investments are considering making their first international investments in the second quarter.

He said they feel "they've postponed foreign investing for a long time."

A number of pension funds are known to be searching for international money managers.

Among those are the approximately $11 billion Virginia Supplemental Retirement System, Richmond, and the city of New York, on behalf of the $17.7 billion employees' fund, the $6.2 billion police fund and the $2.4 billion firefighters fund.

DeWitt Bowman, chief investment officer of the $55 billion California Public Employees' Retirement System, which began funding international investments last year, said market downturns won't "affect our funding schedule. We don't feel we necessarily have the ability to time markets, and with the amount we anticipate investing (a goal of 16% of the fund) we made the decision to go into (foreign markets) over a period of time. If there is weakness in the markets, it's an opportunity to buy (securities) at lower prices." About 7% of the California system's assets are invested internationally.

California fund officials have, however, altered their active fixed-income asset allocation decision-making process.

Initially, the allocation was to be made by fund officials, "and the managers would either invest internationally or domestically," said Mr. Bowman. Now, managers "have more opportunity to make that choice," he said. "It makes more sense for managers to be able to use the domestic markets if yields or returns are more attractive than in international markets."

Other markets, meanwhile, have rallied, which underscores the premise that foreign investing helps diversify assets and that markets don't necessarily march in step.

And, of course, some investors see market downturns as a chance to grab securities at bargain prices.

Many investors, for example, had been retreating from the Tokyo market — especially because of its high price-earnings ratio — so the market's recent tumble has rekindled some interest.

The rationale: The Tokyo market will rebound based on strong long-term economic fundamentals, such as Japan's balance of payments surplus, high savings rate, strength in manufacturing technology and a highly skilled and educated work force.

"Managers are watching Japan. At some point, that market will be a buying opportunity, although we may not be there yet," said John B. Carroll, president of GTE Investment Management Corp., Stamford, Conn. ■

Bridge

Continued from page 3

national Inc. and Jerrico Inc.

First Boston's sale was followed closely by Kidder's announcement that it was getting out of the bridge loan business by recapitalizing with $500 million from its parent and selling, among other assets, its entire portfolio of bridge loans totaling $247 million to GE Capital.

"Syndication of our bridge loans is an option," said Steven Faigan, spokesman for Shearson Lehman Hutton Inc., New York, "but no changes are yet planned."

Mr. Faigan said the size of Shearson's bridge loan portfolio had not changed since August, when the firm provided a $500 million bridge loan as part of the financing in the takeover of Prime Computer Inc., Natick, Mass., by financier J.H. Whitney. Analysts believed at that time Shearson was eager to convert the $500 million bridge loan into high-yield securities.

S&P since has downgraded the credit rating of Prime Computer.

Some investment banks, such as Morgan Stanley & Co. Inc. and Bear Stearns & Co. Inc., have taken a conservative approach to making bridge loans and hold $50 million or less each. Analysts say they are in better shape than other firms.

A spokeswoman for Morgan Stanley, which has an estimated $41 million in bridge loans, said the firm's executives believed the risks outweighed the rewards, so it followed a conservative route. Morgan Stanley, however, has commitments for a $212 million bridge loan to Fort Howard Paper Co., Green Bay, Wis., which is spinning off a subsidiary, if an alternate bridge loan is unavailable, according to the spokeswoman.

In a strategy she said few other firms are using to refinance these loans, the bank syndicates bridge loans as commercial paper to foreign investors and institutional investors.

S&P estimates revenue from activities dependent on junk-bond financing would decline by as much as 20%, hurting the profits of such active bridge lenders as Merrill Lynch Capital Markets, Shearson and First Boston.

Mr. Long said brokerage houses are "trying to get the parent company to take over the loans if they keep them. If so, (the parent) would handle it in the holding company and try to keep them out of the broker-dealer," which would have to take writedowns for capital requirements, he said.

"Failing all else, they will keep looking for ways to offload these loans," Mr. Long said. ■

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AT DEADLINE

Dispute engulfs Connecticut

The State of Connecticut Trust Funds, part owner of the Colt Firearms Division of Colt Industries Inc., is embroiled in a debate over the firm's plan to manufacture a new assault rifle.

Colt's plans spurred questions about using public pension funds to save the gun manufacturer, especially since the Legislature is proposing tougher license requirements on buyers of assault rifles.

Exxon asked to do more

California State Comptroller Gray Davis, who oversees the California Public Employees' pension fund, plans to contact outside directors of Exxon to pressure management to strengthen its commitment to the environment. The fund is a major Exxon shareholder.

In an April 24 letter to Exxon Chairman Lawrence Rawl, Mr. Davis also recommended the company form a subsidiary dedicated to environmental restoration and protection, voluntarily file a report assessing its compliance with the Valdez Principles, and create an environmental audit team.

Unions form realty trust

Four union pension funds in Kentucky — the $7.6 million Bricklayers Local 1, the $49 million State District Council of Carpenters, the $33 million Pipefitters Local 522 and the $19.8 million Plumbers & Gasfitters Local 107 — committed a total of $20 million to form Pension Fund Property Trust, an open-end real estate fund.

W. Lyman Case & Co. is the investment adviser.

Firms top indexes

International and global managers surveyed by The WM Co. lost money but still outperformed the relative indexes during the first quarter, according to preliminary findings.

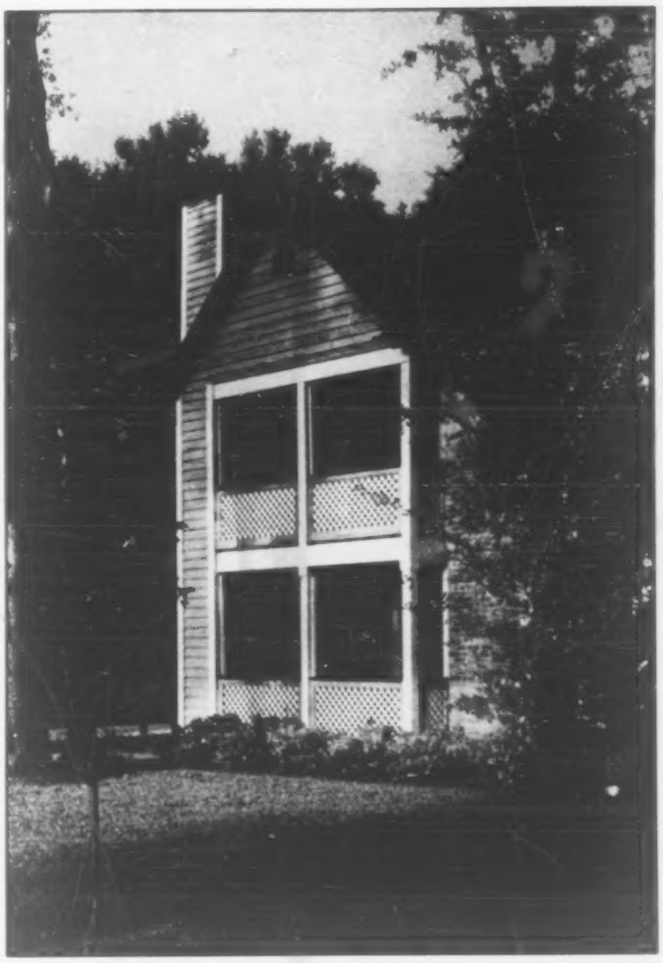
The median non-U.S. portfolio returned −8.4% and the 95th percentile returned −14%, while the EAFE Index returned −19.7%. The composite global return was −5.8%, compared to the World Index's −14.2%.

Custodians hired

Swiss Bank Corp. hired Brown Brothers Harriman & Co. as its U.S. custodian. SBC said in March it was exiting the U.S. custody business. ... Claremont McKenna College tapped The Northern Trust Co. as custodian for $15 million of its $91 million endowment fund. ... The Alaska Permanent Fund selected Brown Brothers Harriman as custodian for the fund's international securities.

Chase joins trust, custody

Chase Manhattan Bank has combined its master trust and master custody units into one business with assets of more than $150 billion, to be managed by Michael Mertz, vice president.



Pension funds are pumping a record amount of money into apartment investments.

Apartment hunt

Investors seek once-shunned property type

By Steve Hemmerick

Pension funds are plowing money into apartments, a property type many of them shunned just a few years ago.

The California Public Employees' Retirement System and the Ohio Public Employees' Retirement System are among the newest players in what many view as a shrewd investment in a generally shaky real estate market.

Pension funds pumped $300 million into multifamily housing in 1989 through commingled funds, the highest amount ever and a 240% increase from the $88 million invested in 1988, said Paul Saint-Pierre, president of Pension Realty Advisors, San Francisco. That doesn't count any direct, separate investments pension funds might have made.

This year, the $56 billion California fund is funneling $500 million into carefully selected apartment investments. Sentinel Real Estate Corp., New York, and Metric Institutional Realty Advisors, Foster City, Calif., will receive about $250 million each to invest in between 10 and 15 out of 100 apartment markets.

In addition, the $20 billion Ohio system, has invested $200 million in apartments, and is picking more up as opportunities arise.

Real estate advisers, meanwhile, are offering 29 commingled funds that would invest exclusively, or a significant amount of contributed dollars, in apartments.

About 12 advisers offered apartment funds in 1989, up from seven in 1988, said Mr. Saint-Pierre.

According to Joseph Diehl, executive director of the National Council of Real Estate Investment Fiduciaries, the apartment sector in 1980 made up 0.4% of the $2 billion Russell-NCREIF Property Index. By December 1985, the percentage decreased to 0.3% in the $10.8 billion index. As of December 1989, the latest available figure, apartments represented 0.7% of $15.8 billion.

Although no craze as yet, several factors are fueling the in-

See **Apartments** *on page 46*

ESOP reduces threat to Conrail

By Trudy Ring

PHILADELPHIA — Consolidated Rail Corp., in a move widely viewed as an anti-takeover play, plans to join the growing list of companies making a public debt offering to finance an ESOP.

Conrail set up the leveraged employee stock ownership plan with about 5 million shares of preferred stock in exchange for a $288 million promissory note from the ESOP. A portion of the proceeds from the debt issue will be used to purchase stock, on the open market, to offset the dilution the ESOP otherwise would have caused.

The company has filed a shelf registration with the Securities and Exchange Commission for issuance of debt securities with an initial offering price not to exceed $1.25 billion. Terms will be determined by market conditions; underwriters may include Morgan Stanley & Co. Inc., New York, according to the filing.

Transportation industry analysts and ESOP experts said Conrail officials might have feared a hostile takeover following the recent expiration of limits on holdings in Conrail stock. Under the federal law that privatized the company, no entity other than another railroad company could hold more than 10% of Conrail's shares until three years after the sale of Conrail by the federal government. The three-year period was up about a month ago.

Analyst Joel Price, vice president-research at Donaldson, Lufkin & Jenrette Securities Inc., New York, said he considers the takeover fears unfounded, as Conrail recently has increased its debt about $700 million and decreased its cash reserves about $400 million. But, he added, "Fear is in the eye of the beholder."

An anti-takeover law recently passed in Pennsylvania is another deterrent to raiders, Mr. Price added.

David Binns, executive director of the ESOP Association, Washington, said Conrail, like many public companies, is interested in getting as much stock as possible into friendly hands.

Graeme Anne Lidgerwood, transportation analyst at First Boston Corp., agreed the ESOP might be a defensive move, but added it also creates an incentive for participating employees.

Conrail previously had an ESOP, which held 15% of the company's stock, when the federal government owned 85%. That ESOP was terminated in 1987, with employees reaping significant gains, Mr. Binns said.

A Shearson Lehman Hutton Inc. research report notes railroads are battling the effects of the economic slowdown, but expressed confidence they will be able to cut costs and show market gains. Conrail's stock declined 6% in price during the first quarter.

The ESOP will cover all non-union and certain unionized employees of Conrail, according to documents filed with the SEC. Conrail officials declined to be interviewed.

Proceeds of the debt offering will be used to refinance the $700 million in short-term notes Conrail recently used to finance a Dutch auction tender offer for 22.3 million of its outstanding shares; to finance a $206 million open-market purchase of common stock (roughly 4.2 million shares)

See **Conrail** *on page 47*

FASB sheds light

Off-balance sheet financing revealed

By Marlene Givant Star

The Financial Accounting Standards Board's new requirement that companies disclose the risks of off-balance sheet financing will, for the first time, reveal to investors and security analysts how much industrial companies rely on the technique.

Once used almost exclusively by financial institutions, off-balance sheet financing — using such instruments as interest rate and currency swaps, loan commitments and options written on securities held and forward interest rate contracts — is growing more common among industrial firms.

EAT•N

Under FASB 105, financial statements for years ended after June 15 will have to disclose the types of off-balance sheet instruments, including principal amounts; collateral or other security; and any concentrations of risk. (Concentration refers to transactions that would be affected similarly by changes in management or the geographic, operating, economic or industrial environment.)

The revision was spurred by the

See **FASB** *on page 45*

NEWS DIGEST

Photo by Alice Garik

Elizabeth Holtzman, comptroller of New York City, is among those protesting a decision by AT&T to cut funding to Planned Parenthood. Page 6.

The Chemical Investment Group has been put on the selling block by Chemical Banking Corp. Page 8.

Shareholder rights are endangered by the rash of anti-takeover legislation; investors ought to sell stocks incorporated in those states. Opinion. Page 16.

SPECIAL REPORT: GLOBAL INVESTING

Pension funds worldwide no longer are automatically turning to the United States as the country of first choice for investing, an indication that pension funds are becoming true global investors. Page 21.

FINANCING

Off-balance sheet financing, once the exclusive instrument of financial institutions, is finding a legion of new fans among industrial companies. Page 1.

Consolidated Rail Corp., fearing a takeover, is joining the growing list of companies making a public debt offering to finance an ESOP. Page 1.

INTERNATIONAL

The British Coal Pension Funds are making a hostile takeover move for the largest investment trust in the United Kingdom. Page 3.

European and Japanese institutional investors are feeling the sting of the junk bond collapse and are reacting with activism. Page 3.

REAL ESTATE

Apartments, once shunned by pension funds, are fast becoming a hot real estate investment. Page 1.

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International alert

Questionnaires for *Pensions & Investments'* annual directory of international and global investment advisers were mailed April 10. The deadline for inclusion in the directory, to be published June 25, is May 13. If you have accounts invested overseas and have not received a questionnaire, contact Christine Philip at (312) 649-5217.

Defections hurt manager

Duncan quits, L.A. County drops Pacific Century

By Steve Hemmerick

The Los Angeles County Employees Retirement Association is dropping Pacific Century Advisers Inc. as manager of a more than $100 million small-capitalization account following the resignation of the firm's valued chief investment officer, William "Beau" Duncan.

After resigning April 5, Mr. Duncan established his own money management firm, Duncan Capital Management, San Diego, with the senior trader at Pacific Century, Mark Freeman, and the operations supervisor, Rebecca LaFerney, who also resigned.

Charles Conrad, administrator for the Los Angeles fund, said his board notified PCA of its intention to terminate the firm after discussing the matter with its consultant, Callan Associates, San Francisco.

Another pension fund, the Dallas Police & Fire Pension Fund, which has a $28 million account with Pacific Century, will consider whether to continue with the firm after its consultant — Wilshire Associates, Santa Monica, Calif. — completes an already scheduled review of its equity investments.

Edward Hartmann, president and chief executive officer of Security Pacific Investment Group, Los Angeles, said he had not been told of the Los Angeles County fund's action, but would look into the matter.

Pacific Century, which manages

See **Duncan** *on page 44*

William Duncan left Pacific Century Advisers to form his own money management firm.

2 top CII officials are clashing

By Marcia Parker

WASHINGTON — Two top officials of the Council of Institutional Investors are clashing over the future of the group and a possible change in leadership.

At odds are Sarah Teslik, executive director, and Paul Quirk, chairman of the executive committee and executive director of the Massachusetts Pensions Reserve Investment Management Board.

Indeed, members attending the council's annual meeting here earlier this month said the conflict was played out in the corridors and between sessions in discussions over who should lead the organization.

Some say the two have a personality clash; others say it's a philosophical difference of opinion.

Ms. Teslik, whose contract is up for renewal July 1, acknowledges a problem exists, and says she believes Mr. Quirk is displeased with her performance. Mr. Quirk denies that, and says the friction comes from the rough-and-tumble debate under way over the council's future.

Both admit to having had differences of opinion in the past on the council's activities.

Ms. Teslik's performance is being reviewed by the executive committee as part of a routine examination to determine whether her contract should be renewed.

The executive committee also is charged with hammering out a new direction for the council. Mr. Quirk appointed Dale Hanson, chief executive of the California Public Employees' Retirement System, to head a strategic policy subcommittee to define an agenda for the 1990s.

Mr. Quirk categorically denies he wants Ms. Teslik's job, although that has been a rumor for some time in council circles. Some have said that when Massachusetts Gov. Michael Dukakis leaves office at the end of the year, Mr.

See **Clashing** *on page 47*

Pension execs cool to 144A

By Joel Chernoff and Curtis Vosti

WASHINGTON — The Securities and Exchange Commission's approval of the landmark rule permitting vastly expanded trading of private placements was hailed by investment managers active in the market, but pension fund executives known to dabble in private placements were, for now, indifferent.

The opening up of the market through Rule 144A also will open the door for the National Association of Securities Dealers Inc.'s new PORTAL trading system.

The new rule is expected to affect foreign equity and debt as well as domestic corporate bonds. Initially, the greatest impact is expected on foreign issuers seeking to privately place equities with U.S. institutions.

Rule 144A limits participation in the less-regulated private placement market to investors with at least $100 million in securities under management. Dealers need only $10 million in securities.

"Pension funds our size see the ruling as a non-event," said David Bullett, vice president for the Teachers Insurance and Annuity Association, New York, which had $10 billion in private placements as of Sept. 30.

"I think the ruling will help bring liquidity and lower prices (to the private market). It will also attract more foreign investors to the U.S. private placement market," he said.

For CIGNA Corp., which completed $3 billion in private placements in 1989 and has $12 billion in total private placements, the new rule is "a push rather than a shove" for the private placement business, according to Augustine Demeo, vice president of CIGNA Investments Inc., Hartford, Conn.

"More customers queuing up for money from us is a good thing," said James Coxon, senior vice president of CIGNA Corp.

While the ruling is seen as a positive by David Blood, vice president and manager of the private capital markets desk at Goldman, Sachs & Co. Inc., New York, he acknowledged pension funds may hold back their support.

"The market will develop over time," Mr. Blood said. "The scope of the development depends on

See **Rule 144A** *on page 46*

Activity on the PORTAL trading system is expected to pick up with the approval of Rule 144A for private placements.

Lockheed ESOP faces legal storm

Experts say challenge won't fly

By Joel Chernoff

LOS ANGELES — Harold Simmons' challenge of the Lockheed Corp. proxy vote might provide the first test as to whether certain defensive ESOPs will fly in court.

The Dallas-based investor's lawsuit over how the ESOP's shares were voted in the fight for control of the company, however, may encounter a shaky ride. Lawyers familiar with the Lockheed employee stock ownership plan believe the plan's design and the conduct of its trustee, U.S. Trust Co. of California, address issues raised by the Department of Labor in voting participant shares.

Harold Simmons is charging Lockeed's ESOP is an illegal entrenchment device.

These factors are likely to provide legal support for the ESOP's vote and probably will prevent the Labor Department from intervening in the case, pension experts believe.

The design of the Lockheed ESOP is "quite cunning," acknowledged Robert A.G. Monks, president of Institutional Shareholder Services Inc., Washington, and a former Labor Department pension chief. Mr. Monks' firm supported Mr. Simmons in the proxy vote.

Still, Mr. Simmons has a number of other legal legs to stand on, and no one would count him out.

Dozens of ESOPs have been put in place by U.S. corporations since Polaroid Corp.'s ESOP helped thwart a hostile takeover by Shamrock Holdings Inc. in March 1989.

The merger mania of the 1980s has withered, leading many experts to believe the battleground for corporate for control will revert to the traditional proxy contest. But how ESOP shares are voted — particularly those not yet allocated to participants' accounts — remains in dispute, and may have an important bearing for future proxy battles.

The April 19 lawsuit, filed in U.S. District Court in Los Angeles by Simmons-controlled NL Industries against Lockheed and its directors, may provide the first major test of those issues.

The Lockheed ESOP was created last April, and has 18.9% of the company's stock. NL charged the creation of the ESOP was an illegal entrenchment device, that the ESOP's 12.2 million shares should not be counted in the recent proxy vote and that voting irregularities — including some by the ESOP's trustee — affected the tallies.

As Lockheed's largest investor with 18.94% of its common stock, NL wants the court to nullify the ESOP's votes, count disregarded votes in Mr. Simmons' favor and have his own slate be recognized as directors. Alternatively, Mr. Simmons called for a new election in which no ESOP shares would be counted. Lockheed's nominees won between 58% and 61% of the vote.

The Lockheed ESOP relies upon a novel arrangement that passes voting rights to participants for both the 1 million shares of employer-allocated stock to their accounts and the 10 million shares not yet allocated and sitting in a "suspense" account. (Another 800,000 shares were purchased by employees through contributions to the ESOP.)

In marked contrast to the situation encountered a year ago in Polaroid's ESOP, the Lockheed ESOP did not rely on a mechanical test for determining the vote of shares not allocated to participants.

Under the Polaroid ESOP, unallocated shares were voted proportionate to the vote of the allocated stock. That method raised the hackles of the Labor Department, which maintained the plan trustee could not sidestep its fiduciary duties through adherence to a rigid voting formula.

But Lockheed used another Labor Department position in designing its ESOP. The department said it is the trustee's job to manage and control plan assets — except where the participant has been given authority to vote the allocated shares.

Lockheed didn't stop at giving participants the right to vote their allocated shares: The company made them named fiduciaries for the non-allocated shares as well, permitting them to cast ballots.

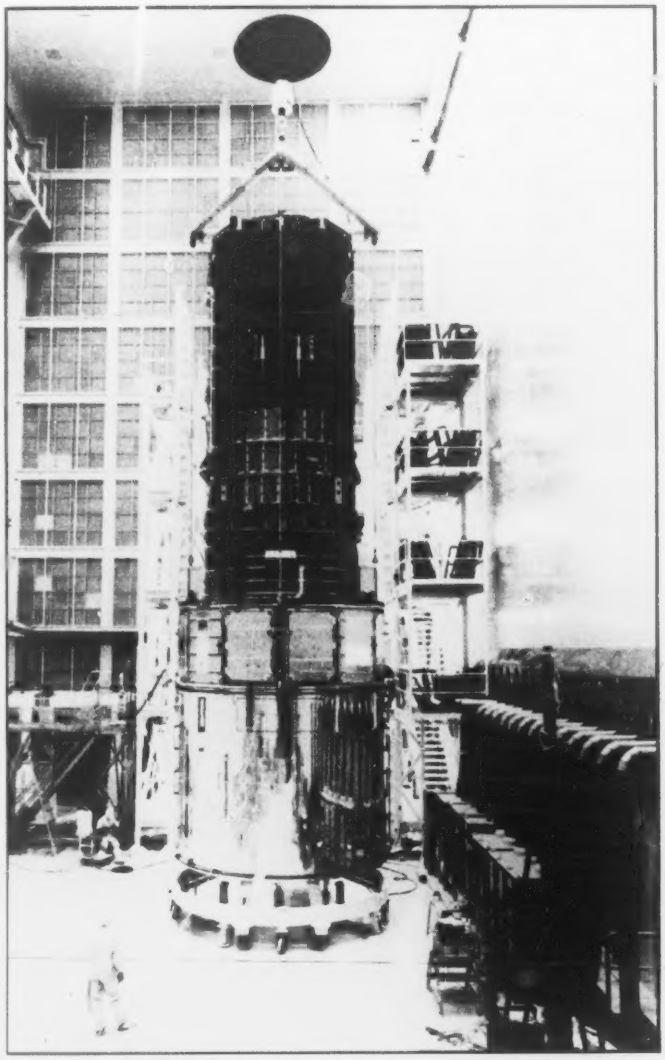
The plan "tracks the Labor Department's position and goes one step further," noted Steve Sacher, a pension lawyer with Johnson & Gibbs, Washington.

Showing that independent voting decisions were made on the ESOP stock, participants were given separate proxy votes for the allocated and unallocated shares, explained Ronald S. Rizzo, a partner in the law firm of Jones, Day, Reavis & Pogue, Los Angeles, which represents U.S. Trust.

Voting results for the allocated and unallocated shares differed on a proportionate basis, Mr. Rizzo said. A breakdown was not available.

In addition, U.S. Trust took another action that likely would give the Labor Department pause before intervening. Following the direction of the department's stand in the Polaroid case, the trustee voted the 30% of the allocated shares that participants had

See **Lockheed ESOP** *on page 47*



Lockheed, which had a hand in deploying the Hubble Space Telescope into orbit, took several steps to ensure its ESOP does not run afoul of the Department of Labor.

British Coal bids for trust

By Margaret Price

LONDON — British Coal's pension fund this week is expected to make its formal hostile bid worth about $1.68 billion for Globe Investment Trust PLC, Britain's largest investment trust.

The move, if completed, would represent the roughly $20 billion fund's fourth acquisition of an investment trust. Previous acquisitions were those of Touche Remnant Industrial & General, Drayton Premier and a controlling interest in British Investment Trust.

London-based Globe has about $1.96 billion in investment trusts and also manages about $1.3 billion of pension assets through its Globe Morley subsidiary.

Details were limited on why British Coal wanted to acquire Globe, but according to a release, "The acquisition . . . enables the British Coal pension funds to increase their holdings in an investment trust where they already have a significant shareholding, at a discount to the value of the underlying portfolio."

Some analysts suggested the strategy was to employ an efficient way of investing in the stock market. "They are looking to put nearly a half-billion pounds into the stock market. To do that (directly) without driving up prices would be difficult," said John Korwin-Szymanowski, investment trust analyst at S.G. Warburg & Co., London. An easier, cheaper way "would be to take over the funds that have those stocks," he said.

With nearly a 34% stake in Globe, British Coal is the trust's largest single shareholder. The takeover bid was triggered after the funds, which previously had a 28.8% stake in Globe, bought another 5% of its stock late in the week beginning April 15. By British law, a stock holding of 30% in a company automatically requires the investor to make an offer to all other company shareholders.

For its part, Globe is fighting the bid and has advised its shareholders to "take no action in respect of the proposed offer." The company said the offer of 1.91 pence per Globe share, about $3.11, is "wholly inadequate in that it fails to reflect Globe's historic performance, its inherent value and its future prospects."

Globe is expected to protest the bid to the governmental Office of Fair Trading, which could request an investigation by the Monopolies and Mergers Commission. ■

'Junk' spurs foreign activism

By Marcia Parker

Stung by the collapse of the U.S. junk bond market, European and Japanese institutional investors of billions of dollars in illiquid junk bonds issued by U.S. companies have been prodded into becoming more like their activist brethren in the United States.

Indeed, these overseas investors are joining creditor committees and agitating for stronger covenants and stricter disclosure to protect them in the future.

Little attention has been fo-

U.S. companies' junk bonds have been affected by the turmoil here. The public Eurojunk market is a nascent one, and few European or Japanese junk bond buyers are bemoaning its apparent demise.

Moreover, some bankers speculate the failure of the public high-yield market will give the growing overseas private market a boost. A number of mezzanine funds raised largely from institutional investors have cropped up in recent years.

The bulk of the foreign buyers did not seek to buy junk bonds; many of their purchases began as investment-grade bonds, but de-

or suffered ill financial health. But many issuers are in good shape, and their junk bonds are rated at the higher quality end of the ratings.

Foreign bondholders historically have not been as aggressive as their U.S. counterparts in filling their portfolios with junk bonds or asserting their rights in the face of plummeting values of their holdings and defaults by U.S. issuers such as Coleco Industries Inc. and Southmark Corp.

While no one is saying the era of activism is dawning in European and Japanese bondholder circles, there are small signs the historical

A sampling of speculative-grade Swiss Franc bonds

(As of March 14)

Company name	Issue date	Issue amount ($ millions)	Coupon	Date of maturity
Charter Medical	11/14/85	[illegible]	6.000	12/12/95
Coleco Industries	05/03/85	80.0	6.500	06/12/93
Flexivan Leasing	08/05/86	100.0	6.000	08/05/96
Kinder-Care	03/06/86	62.5	6.000	04/11/96
Kinder-Care	07/05/85	130.0	5.750	07/29/96
Owens-Corning	10/16/86	105.0	5.375	11/26/00
Pan Am	06/19/86	100.0	6.500	07/19/95
RJR Nabisco	05/09/86	200.0	5.375	06/17/01
Safeway Stores	04/02/86	100.0	6.250	04/03/01
Southmark	07/17/85	120.0	[illegible]	08/12/93
Southmark	08/01/87	100.0	[illegible]	07/14/94
Texas Eastern	09/17/86	100.0	6.750	10/16/96
Wang Laboratories	08/21/84	200.0	4.750	08/21/96
Wang Laboratories	02/19/85	200.0	4.750	02/20/00

Source: Moody's Investors Service, New York

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AT&T charity cut angers NYC fund

By Trudy Ring

NEW YORK — American Telephone & Telegraph Co.'s decision to discontinue funding the Planned Parenthood Federation of America has aroused the wrath of one of AT&T's largest shareholders.

Trustees of the $17 billion New York City Employees' Retirement System, which owns 3 million shares — or about 1% — of AT&T, said they are "deeply disturbed" by the decision, and fear it will hinder Planned Parenthood's ability to prevent unwanted pregnancies. The trustees made the statements in a letter to AT&T Chairman Robert E. Allen.

The letter was signed by Elizabeth Holtzman, New York City comptroller, and trustees. It said AT&T disenfranchised its shareholders by making the decision to stop the funding before the matter came to a vote at its recent annual meeting. An individual shareholder had submitted a resolution calling for AT&T to refrain from supporting organizations that endorse, counsel on or perform abortions.

The fund has not received a response from AT&T, but a spokesman said the company made the decision because of Planned Parenthood's increasingly political nature, not because of the shareholder resolution or the organization's position on abortion.

AT&T's philanthropic arm, the AT&T Foundation, gave Planned Parenthood $50,000 this year; its donations to the organization during the past 25 years total between $400,000 and $500,000, company spokesman Burke Stinson said.

It will discontinue the contributions, effective next year, because of Planned Parenthood's decision to become involved, for the first time, in congressional races where candidates' views on access to abortion are an issue, Mr. Stinson said. "We did not want to mix philanthropy and politics," he said.

Mr. Stinson added AT&T, in its proxy material, called for shareholders to vote against the anti-abortion resolution, which 94.5% of them did.

AT&T's contributions to Planned Parenthood did not go toward abortion services, but rather for educational programs designed to prevent teen-age pregnancy. AT&T is continuing to fund similar programs through other, less political organizations, Mr. Stinson said.

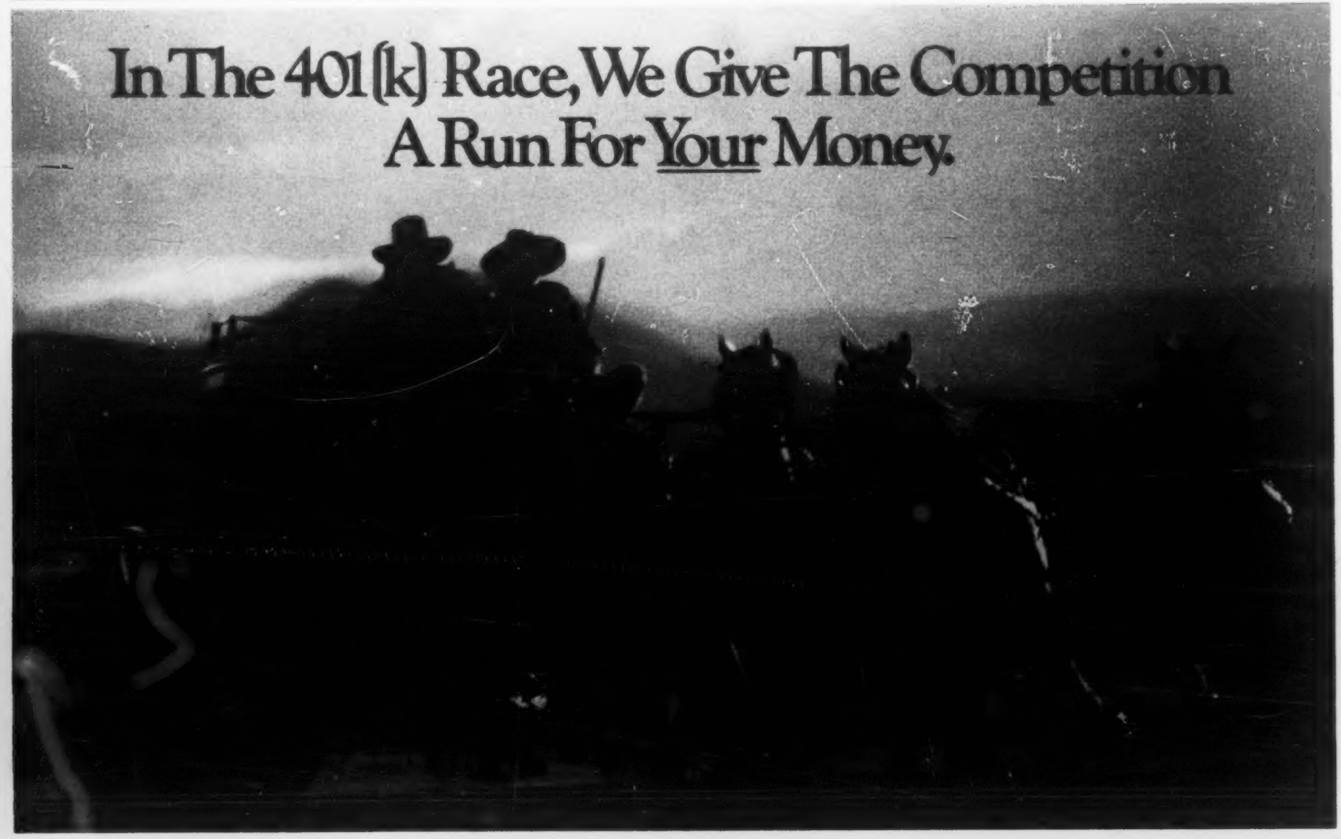
A spokeswoman for the New York City system questioned whether Planned Parenthood's political activity should have been a problem for AT&T; the organization's education and pregnancy prevention programs are separate from its political efforts, she said.

The letter also said trustees are concerned that AT&T's action may cause the value of its stock to fall, as top management will be forced to spend time responding to negative publicity instead of focusing on corporate performance. Also, several organizations have threatened to boycott AT&T, the letter said. ■

CORRECTIONS & CLARIFICATIONS

• The one-, three- and five-year returns for the **FT-A European & Pacific Index** reported in the Feb. 19 **PIPER/PIPER+** section for periods ended Dec. 31 were incorrect. The correct figures are 11.3%, a compound annualized 21.9% and a compound annualized 36.7%, respectively.

• Funding for **Ametek Inc.**'s $39 million account with Oak Hall Capital Advisors Inc. did not come from cash, as was reported in the April 2 issue. The assets had been managed by the predecessor firm to Oak Hall, which recently renamed itself.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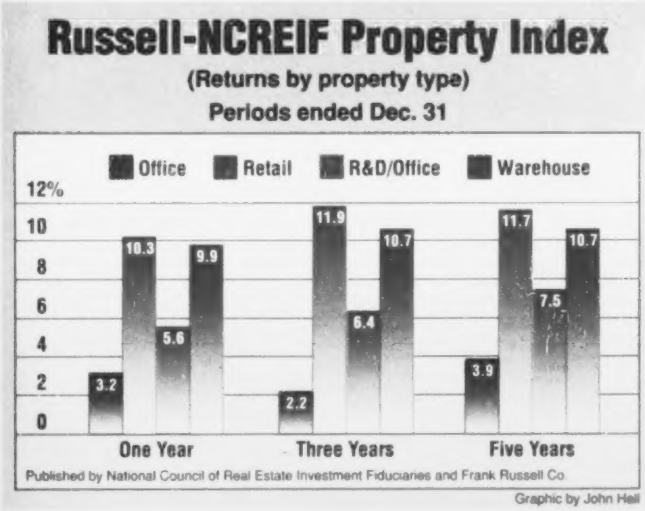

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Graphic by John Hall

WALL STREET

A poor ending for securities firms

■ Declines in trading profits and values of positions in investment accounts resulted in poor fourth-quarter results for U.S. securities firms.

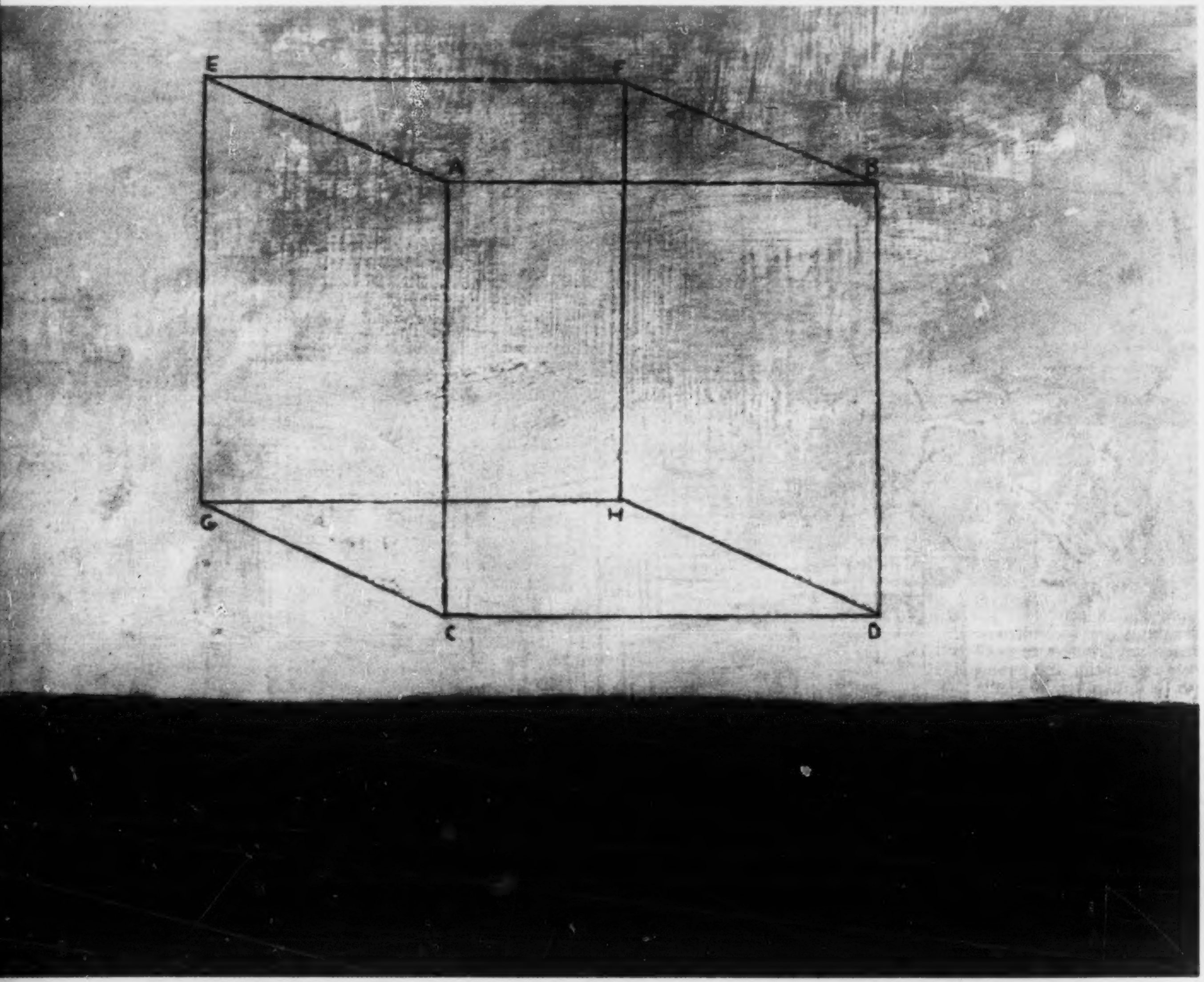
Trading and investment accounts are among the key revenue sources of securities firms, along with mergers and acquisition activity and private placement fees.

According to a report by Jeffrey M. Schaefer, senior vice president-research of the Securities Industry Association, trading profits dropped to $2.7 billion in the fourth quarter of 1989, the lowest profits for any quarter of the year.

Investment accounts lost $221 million in the quarter vs. a $308 million profit the previous quarter, a reflection of declines in both stock and bond prices.

But the corporate debt market has rewarded investors this year. In the first two months of 1990 institutional net purchases surged to $840.6 million daily compared with $565 million in 1989. January saw the highest monthly net purchase figure since August 1987 and even surpassed 1986's record daily average of $859.7 million.

"Clearly institutions were attracted to fixed-income securities as interest rates climbed throughout January and February, finishing up about 60 basis points over December," the report said.



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PUBLIC FUNDS

Iowa combining fire, police funds

■ The Iowa Legislature approved a bill consolidating 87 local Iowa fire and police officers' pension plans into a unified statewide system effective January 1992.

Gov. Terry Branstad is expected to sign the bill in early May.

State Treasurer Michael Fitzgerald said he has not seen a final version of the bill approved by legislative conference committee, but said the consolidation should create a plan with approximately $500 million in assets.

The new system, he said, would be managed by a 13-person board of trustees.

Greg Kusak, deputy administrator for benefits at the Iowa Public Employees Retirement System, said the new system was created partly because of legislative frustration at a lack of standardized reporting and actuarial information concerning the retirement systems.

INTERNATIONAL

Canadians urged to move slowly

■ Frank Russell Canada is cautioning its 27 clients not to rush to increase international investments.

The minister of finance has proposed allowing Canadian pension funds to invest up to 20% of assets internationally over the course of five years. Now, funds may invest only 10% of their assets internationally without penalty. Any investments over that amount are subject to a 1% per month compounded tax.

The Canadian parliamentary system, with the party in power having a working majority in the Legislature, makes it probable the law will pass, eventually.

But in a letter to its clients, the consulting firm cautioned the proposal, included in this year's budget message, has not yet become law, and they should wait lest they be hit with the "onerous" penalty.

"Last year's budget hasn't even been passed yet," said Beth Morris, a Russell consultant.

INVESTING

And you thought FIFO was tough

■ Hopelessly hung up on defense industry acronyms? If so, Gary Reich has the answer.

Mr. Reich, aerospace and defense electronics analyst at Shearson Lehman Hutton Inc., produces an annual guide that lists, alphabetically, hundreds of acronyms.

Among the listings are ALCEP (AUTOSEVOCOM Life Cycle Extension Program); JINTACCS (Joint Interoperability of Tactical Command and Control Systems); and TOW (Tube-launched, Optically Tracked, Wire-Guided Antitank Missile).

Only one thing is missing: Many readers need an explanation of the words the acronyms represent..

COMMENTARY

Pigeonhole mentality and special benchmarks

By F.J. Gould

At great cost to their pension fund clients, influential consultants have created a thriving business in pigeonholing active equity managers into simple investment strategies.

This pigeonhole mentality originated the widely used peer-group styles and peer-group performance measurement. The latest form of the pigeonhole metamorphosis involves the creation of expensive and often nonsensical specialized benchmark portfolios.

To the pigeonhole thinking of consultants, and of their pension sponsor adherents, it's no longer suitable to compare a manager's performance against the Standard & Poor's 500 Stock Index. Now, say the consultants, a pension sponsor needs to develop a customized equity benchmark unique to each manager's investment style.

Consider this scenario: A sponsor hires a domestic equity manager who over time, in this sponsor's thinking, can outperform the S&P 500 on a risk- and cost-adjusted basis. The sponsor's consultant pigeonholes this new manager as a "value" manager. The consultant tells the sponsor his equity target, the S&P 500, is irrelevant with respect to enlightened performance measurement. Because the manager has a value style, he must be compared to the universe of other value managers. Further refining the pigeonholing concept, the consultant tells the sponsor to compare the manager to a specially developed benchmark of stocks, supposedly consisting of that manager's selection universe. After all, the consultant and sponsor have to separate luck from skill. Anyone knows that if value is out of style, you can't expect the manager to do as well as the S&P 500; and if value is in style, well, maybe the manager doesn't deserve credit for the performance.

Illustration by Douglas A. Bowles

I'm astonished so many sponsors are taken in by this fast talk. A specialized value benchmark may have a place for a value manager who was hired because he is a value manager. But if I believe the value manager should outperform my broad benchmark, namely the S&P 500, then that is unequivocally how I should measure the manager's performance. This doesn't mean I expect the manager to beat the S&P 500 every year. What is meaningful is the extent to which, over time, the manager's actual performance deviates from his anticipated performance.

Unfortunately, the pigeonhole mentality leads to a different prescription. Consultants argue that instead of hiring the active value manager the sponsor could invest in a passive specialized value benchmark. That is certainly true. So the sponsor should ask: What performs better relative to the S&P 500? The active value manager, or the specialized passive value benchmark?

The sponsor should base his decision whether to invest in the specialized value benchmark as a low-cost passive alternative to the active manager on the following comparison: performance of the specialized benchmark relative to the S&P 500 vs. performance of the active manager relative to the S&P 500. In other words, the performance of the manager relative to the specialized benchmark is a red herring.

It is important in my scenario that the value manager was hired not because he is a value manager, but because he is supposed to outperform the broad market, namely, the S&P 500. In this context, all that matters is the risk-adjusted returns relative to the S&P 500. Of conceptual importance is that relative to the S&P 500, the active value manager's portfolio may have risk-adjusted returns better than those of the specialized value benchmark. At the same time, the active portfolio may show returns lower than those of the benchmark when viewed on an unadjusted basis.

The pigeonhole simplicity leads to a world of sponsors overwhelmed with specialized benchmarks. A logical extension is the disappearance of active management.

Instead, we might envision a universe of ready-made competing specialized benchmark portfolios, each claiming to outperform the other. The aggregate portfolio resembles a modular stereo system and the potential for adding innumerable specialized high-tech components. Just as a stereo's amplifiers lead to more specialized pre-amps and woofers lead to sub-woofers, one can imagine growth portfolios leading to more specialized high-growth portfolios and so on. It becomes an endless effort to break down the market into more and more refined components — or pigeonholes. ■

F.J. Gould is principal of Investment Research Co., Chicago, and professor in the University of Chicago's Graduate School of Business.

LETTERS TO THE EDITOR

Index arbitrage is poison

■ Stanley Shopkorn's self-serving article in the Jan. 8 Commentary page implies that if commissions for firms such as his were higher, there would be no index arbitrage and no evanescent volatility.

He asserts the growth of indexation and momentum investing are the real generators of volatility. Just how does the low-transaction nature of indexation create added volatility? It's laughable to claim "momentum" investing has supplanted value investing: are there any managers who don't claim to be "value" investors?

Mr. Shopkorn goes on to say that to criticize index arbitrage as a source of stock price movements divorced from fundamental reality is misplaced, since technical analysis approaches are "divorced from fundamentals" as well. One would hope the vice-chairman of Salomon Brothers understands the basic premise of technical analysis is that fundamentals are reflected in stock prices and price movements. The movement of fundamentals and their impact on investor sentiment is simply "read" through technical approaches.

This is a far cry from price movements caused by the mathematical divergence from a yield-discounted normal spread of futures to equities. The comparison of technical analysis and index arbitrage as two similar generators of volatility through abandonment of fundamentals is a devious analogy.

The real distortions in Mr. Shopkorn's case emerge when he associates index arbitrage and the firms that operate with it as "providers" of liquidity. Adding liquidity is not simply a matter of adding a participant or dollars in motion in the marketplace. Liquidity has always meant the ability of participants in a market to buy and sell without disrupting the continuity of pricing. This is what New York Stock Exchange specialists are charged to do.

We are invited to pay higher commissions so that Mr. Shopkorn and other block traders can do a better job of providing liquidity. This type of transaction is an act of principal risk-taking, and not an area where commissions should be involved.

No one supports index arbitrage except those who directly profit from it. Index arbitrage is like the tiny coral snake. It kills through a small dose of potent toxin, rather than strangulation or smothering. If you see one, you will not walk down the path across which it lays. Just ask any institutional trader if he or she would like to buy equities when the futures trade at a discount.

Lowell Miller

President
Miller/Howard Investments Inc.
Woodstock, N.Y.

Vanguard reports growth

■ I read *Pensions & Investments*' Scorecard report (Feb. 5) with great interest, but was sorry to see that for whatever reason Vanguard's figures were not included.

I thought your readers would be interested to know that, as a leader in the retirement plan marketplace, The Vanguard Group has grown to a position of importance, as evidenced by the following: new GIC business (net) was $450 million; new equity business (net) was $925 million; new fixed-income business (net) was $421 million; new balanced business (net) was $263 million; and new equity indexed fund business (net) was $273 million.

At Vanguard, we measure our success by the faith our clients place in us. We continue to look forward to improving our position in the institutional market.

James H. Gately

Senior Vice President-Institutional
The Vanguard Group
Valley Forge, Pa.

Portability threatens loyalty

■ Regarding the Feb. 5 commentary "Pension portability: No easy solution": This article, as do most on this subject, totally ignores the basic reason an employer establishes a pension program.

There is a basic feeling that employees become worth more to the employer as their experience and time with that employer grows. In recognition of that increased worth, and to encourage stability, the pension is established to reward an employee who stays with his current employer until retirement.

Some employees prefer to change jobs every three or four years. Rather than stay with their current employer and get the usual 5% or 6% wage increase, they job shop, find someone who will give them a 10% or 15% pay jump, and change jobs, over and over. In exchange for their pension they get a big jump in pay.

To suggest that the employer of those who change jobs every three or four years might fund (and continue to fund) that employee's pension at the same level as he funds the pension of those who stay with him for their entire working career is to completely ignore the basic reason an employer establishes a pension plan. The employer is much better served by spending his money on current employees — not job-hoppers.

If total equity for all retirees is the goal, let's just double or triple the employer's (and perhaps the employee's) Social Security contribution and the benefit, which is mandatory and completely portable, and eliminate all pensions, 401(k)s, etc. Let's admit that the employer no longer has any control over the policies or funding of his pension, and nothing to gain from providing one, and transfer the entire program into another government mandate, which should then be funded primarily by the employer — one step closer to socialism!

W.C. Payne

Safety director
Yates Construction Co. Inc.
Stokesdale, N.C.

Tracking EAFE index

■ We would like to express our disappointment over the incorrect returns reported to Pensions & Investments Performance Evaluation Reports for our international EAFE stock index fund (*P&I*, Feb. 19). Because we pride ourselves on our ability to consistently track the index with minimal tracking error, we think it is important to bring this correction to your attention.

The correct three-month return for the fund was 4.6%, matching the index.

The one-year return was 10.8%, again matching the index.

The three-year return was 20.9% compared with 21.2% for the index.

Peter E. Braun

Vice president
State Street Bank and Trust Co.
Boston

FT-EuroPac indexing

■ The one-year return of the Travelers International Index Fund, which tracks the returns of the FT-EuroPac, was reported correctly in the Feb. 19 issue as 11.2%.

Unfortunately, you incorrectly reported the one-year FT-EuroPac return as 10.8%. The actual return for the year ended Dec. 31 was 11.3%.

As an index fund manager, we are happy to accept the 10 basis points of tracking error rather than 40 basis points of undesirable alpha.

With many investment strategies, consistent performance is a virtue.

Mark N. Peters

Marketing manager
TIMCO
Hartford, Conn.

Editor's note: The returns for the FT-EuroPac were transmitted incorrectly to Rogers, Casey & Associates, which compiles PIPER. The correct returns are listed on page 6.

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Bondholders

Continued from page 3

passivism is giving way to a more assertive stance and greater sensitivity to credit quality.

Wilbur Ross, senior managing director at Rothschild Inc., New York, said he's seeing a big change.

Rothschild, through its bankruptcy advisory practice, has represented many well-known U.S. companies in bankruptcy, including Drexel Burnham Lambert Inc. and Coleco.

Mr. Ross noted Drexel's major creditors include a large number of Japanese and other non-U.S. financial institutions, many of which own junk bonds underwritten by Drexel.

"Drexel's was the first (major company) creditors committee whose members are predominantly non-U.S.," Mr. Ross said. "Historically, foreign institutions have been passive in their representation. None of the offshore institutions on the Drexel committee has missed a meeting."

Through the years, U.S. companies such as Kinder-Care Inc., Pan Am Corp., RJR Nabisco Inc., Safeway Stores, Southmark and Wang Laboratories Inc. have issued junk bonds in the Euromarkets to attract a wider group of investors in Europe and Japan. Drexel, the now-defunct kingpin of the junk bond world, was instrumental in placing many of these bonds with European and Japanese institutional investors.

Reliable data on the quantity of junk bonds held by foreign institutions isn't available, but investment bankers say pension funds, money managers and other institutions hold the bulk.

Calls to more than 12 foreign institutional investors did not find a single one that acknowledged holding U.S. company junk bonds. But all of them said they are seeing the first signs of increased bondholder activism.

Rating agency officials, investment bankers, money managers and pension funds overseas say European and Japanese investors who bought these bonds either are sitting on them in the hopes of a turnaround or are trying to unload them. Many are having a hard time finding buyers.

Because the overseas junk bond market is just getting off the ground, the secondary market is relatively small and illiquid. The recent trend away from highly leveraged transactions is likely to continue and already is reducing the supply of high-yield paper from U.S. companies. With the junk bond market collapse at home, U.S. companies aren't issuing junk bonds at home or abroad.

"There's more concern about event risk. There's a whole new look at covenants," said Jeff Hayes, senior vice president-international bond investments at UBS-Phillips & Drew, London.

Speculative-grade debt comprises less than 2% of the estimated outstanding Euromarket debt, according to Moody's Investors Service, New York. Moody's rates $13.6 billion of non-investment-grade debt in the Euromarket, a small amount when compared with the $210 billion outstanding in speculative-grade debt in the United States.

About 71% or $9.6 billion of the rated speculative-grade debt in the Euromarket has been issued by U.S. issuers. The rest of the issuers are U.K. and Australian companies, the rating agency said.

Because of special events such as leveraged buy-outs, recapitalizations and defaults in the United States, the Eurobonds of some issuers have been downgraded, resulting in some secondary market losses for some investors. About 45% or $6.2 billion of the rated speculative-rate Eurodebt originally was investment grade, Moody's said. All were U.S. issuers.

Moody's estimates 68% or $9.3 billion is in U.S. dollars; 15% or $2 billion in Swiss francs; 7% or $950 million in deutsche marks; and 4.7% or $639 million in yen.

Switzerland, which has been a major source of money for international borrowers of high credit quality, has seen an increase in the number of junk bonds either issued there or that have fallen in credit quality, the rating agency said. About 3.8% of all listed Swiss foreign bonds are rated below Ba1, including original issues as well as "fallen angel" junk bonds, according to Moody's. That makes the Swiss franc junk bond sector proportionately larger than the Eurojunk market.

Some 66% of rated Swiss franc junk bonds are obligations of U.S. companies, according to Moody's.

Nearly all the bonds are straight issues with no equity features. A large portion — about 40% — of the market consists of fallen angel bonds, which fell to speculative-grade status after issuance into the Swiss market. One, Wang Laboratories, dropped to speculative-grade status because of a fundamental decline in credit quality.

Nine other issuers affecting some 1.5 billion Swiss francs fell from grace following special events such as RJR Nabisco Inc.'s leveraged buy-out and a major acquisition by American Medical International.

A large Swiss money manager who did not want to be identified said most Swiss investors are hanging on to the bonds and hoping workouts will revive them. He said bondholders are getting more vocal in speaking up for their rights as members of creditor committees and are speaking out earlier if they sense trouble. ■

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May 14, 1990

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AT DEADLINE

IRS to overhaul plan rules

The IRS unveiled an overhaul of its non-discrimination rules that is expected to affect the design of virtually every pension plan. It would require plans to not discriminate against lower-paid employees, revise earlier minimum participation standards and provide a definition of compensation.

FASB looks at book value

The Financial Accounting Standards Board has added book-value accounting for guaranteed investments to its agenda. An exposure draft is expected in the fourth quarter.

Foreign placement revealed

In what might be the first foreign private placement in the United States under the SEC's Rule 144A, Goldman, Sachs & Co. has placed $100 million of 10-year unsecured notes for British Aerospace PLC.

UN becomes own custodian

The $8.6 billion United Nations Joint Staff Pension Fund has decided to become its own global custodian. Fund officials will set up a formal network of custody agents and advisers coordinated by custodian Fiduciary Trust International, said Henry Ouma, deputy chief. Local brokers will set up small-cap accounts — totaling $100 million — in the United States, Southeast Asia, Japan and Europe, he said.

Energy firm goes overseas

In its first overseas pursuit, the $180 million pension fund of Commonwealth Energy System hired PCM International to manage $15 million in global bonds, said James Rappoli, assistant treasurer. David L. Babson & Co.'s equity account was reduced to finance the move. New England Pension Consultants, Boston, assisted.

2 form nuclear trust venture

John Nuveen and Duff & Phelps have formed a joint venture — Nuveen•Duff & Phelps Investment Advisors — offering money management to nuclear decommissioning trust funds.

GTE lifts Japanese stocks

The $12.4 billion GTE Corp. pension fund is boosting its Japanese equity holdings slightly. An active Japanese equity manager will be hired, and an account with Nikko Capital Management (U.S.A) increased.

Personnel changes

Lance Tane, a prominent consultant on flexible benefit plans, is leaving The Wyatt Co., New York, to become a partner at Kwasha Lipton, Fort Lee, N.J., as of July 1. . . . **Ralph S. Tate**, formerly vice president of Aetna Equity Investors, has joined Standish, Ayer & Woods, Boston, to oversee equity investments as vice president and director.

SEC rules spawn manager chaos

Performance ads must be net of fees

By Joel Chernoff

WASHINGTON — SEC directives to money managers to deduct their fees from investment performance in advertising materials are about to hit full force.

Starting May 27, registered investment advisers must deduct actual fees from investment returns when advertising performance figures — whether in a published ad, brochure or any other material meant to be read by more than one person.

But that's only half of the story. In late 1989, the Securities and Exchange Commission put money managers on notice that they must deduct, at minimum, "model" fees for historical returns in any advertising materials, going back as far as advisers show returns. But few managers appear to be doing so.

Investment experts argue deducting fees from money managers' composite returns for separate accounts will distort investment results, create an administrative nightmare for consultants' data bases and conflict with recent industry association standards.

Worse yet, it appears the SEC's stance will make life more complicated for sophisticated investors — part of the constituency it is trying to protect.

"All of this SEC mumbo jumbo is not going to help institutional clients," said Robert Shultz, formerly head of RJR Nabisco Inc.'s pension fund.

The SEC interpretation "has the effect of bundling things together when we want to unbundle for purposes of clarity," said Charles Stephens, president of the National Investment Sponsor Federation and director of investments for the UMWA Health & Retirement Funds, Washington.

"It's going to create a lot of work for people and it's not clear if it's going to provide a benefit," said Steven Grant, director of manager evaluations for Colonial Consulting Corp., New York.

Interviews with money managers, consultants and pension executives reveal many are not aware of the SEC positions. Those who are familiar with them disagree as to their impact. The SEC also has not addressed many of the issues that arise by deduction of fees.

The picture that emerges is one of massive confusion and widespread non-compliance.

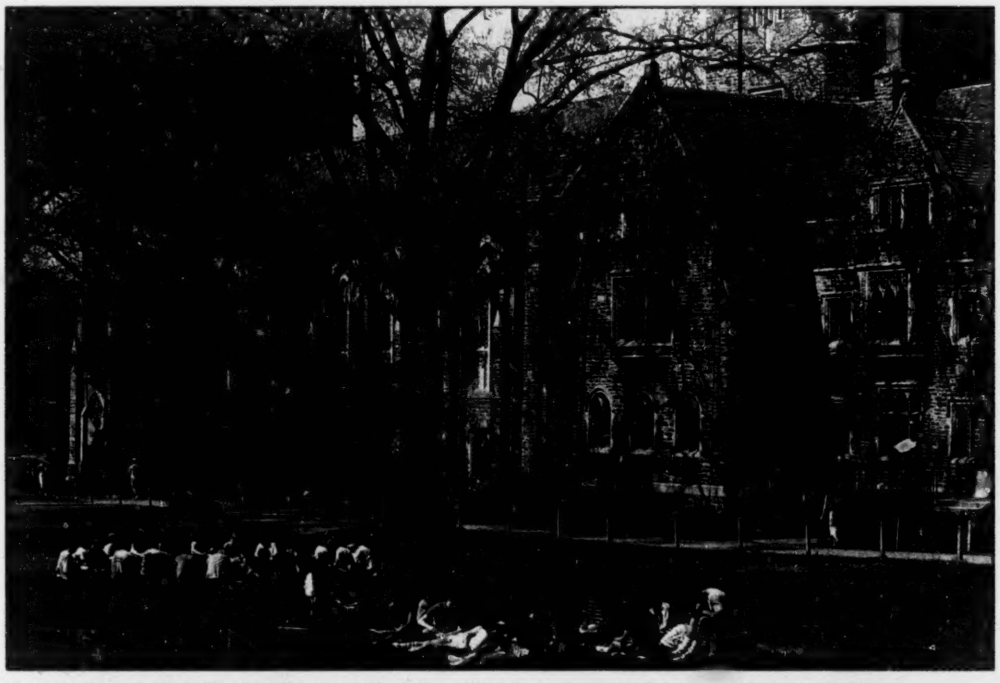
"As much as I thought we were up on this stuff at NWQ, (these rules have) escaped me," said James Owen, managing director of NWQ Investment Management Co., Los Angeles.

The SEC's stance stems from a 1986 letter to Clover Capital Management Inc. Taking a page from its rules for mutual funds, the letter said advertised model or actual performance results must net out advisory and other fees. The agency was concerned that not deducting fees gave a false impression of a manager's performance — particularly when that fee is compounded over a period of time.

"Our view is that when an adviser advertises performance, he does so to say something about his competence or experience with his clients," explained Mary Podesta, associate director of the SEC's division of investment management. What clients had to pay out in fees is "material information," she said.

Under severe industry pressure,

See **Performance** *on page 45*



Duke University is following the top U.S. universities by spinning off its investment subsidiary.

Duke will spin off subsidiary

By Joel Chernoff

DURHAM, N.C. — Following in the footsteps of Harvard and Princeton, Duke University is spinning off its investment management operation into a separate subsidiary.

The new unit, tentatively called Duke University Management Co., will start July 1 and will oversee the investment of more than $1 billion in university assets, including $560 million in endowment fund assets and nearly $150 million in pension assets.

The unit also will pursue technology transfers, acting as a "midwife" to help develop ideas created by Duke professors into commercial ventures, explained Eugene J. McDonald, Duke's executive vice president of finance and administration who will serve as president and chief executive of the new entity.

The spinoff had its genesis 18 months ago but was not approved by Duke's board of trustees until April. By setting up the separate investment unit, financial personnel will be able to free themselves of many administrative responsibilities, such as accounting for gifts to the university, Mr. McDonald said.

In addition, the separate incorporation will enable the unit to improve compensation to help hire and retain talented professionals. Incentive compensation arrangements are under consideration, he acknowledged.

Harvard University, Cambridge, Mass., pioneered the con-

See **Duke** *on page 45*

Protected notes gain acceptance

By Margaret Price

At least eight U.S. pension funds, including those of Hughes Aircraft Co. and Pacific Telesis Group, are participating in a relatively new foreign investing method that insures against being hurt by market losses while capitalizing on gains.

The technique, most commonly known in the United States as protected equity notes, is used as a passive strategy that can substitute for indexed funds. Though it can be used domestically, its most popular application has been in foreign investing, especially in Japan.

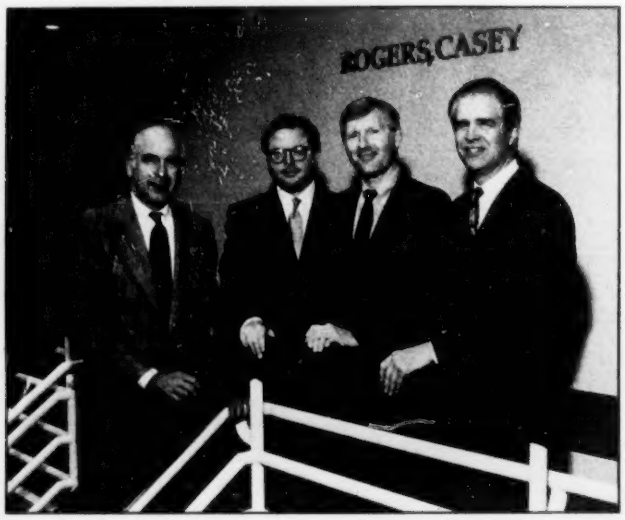
In a protected equity note, an investor, such as a pension fund, lends money to an institution that promises to pay — upon maturity of the loan — the full principal as well as at least 100% of a certain market or markets' appreciation over the length of the loan. A coupon that represents part of the market's dividend yield often is included. The institution, in turn, lends the money at market rates, sometimes hedging all or part of its position.

Because no stocks are bought, the process imposes no management, custody or trading costs on investors.

Dean D'Onofrio, vice president-global equity at Bankers Trust Co., said his firm is, in effect, replicating an "at the money" call option on the market the investor specifies, and using the money from the investor to make loans

See **Protected notes** *on page 42*

NEWS DIGEST



Paul Berg, far right, joins Stephen Rogers, from left, John Casey and James Beasley as a principal of Rogers, Casey.

The Berg-Rogers, Casey merger creates an entity with broader resources to meet clients' growing needs. Page 4.

The PBGC list of the 50 companies with the largest unfunded pension liabilities causes a stir. Page 43.

SPECIAL REPORT: FINANCIAL SALARIES

Former Walt Disney CFO Gary Wilson was the highest paid chief financial officer in 1989 at $2.5 million, according to *Pensions & Investments*' survey of more than 1,000 public companies. Page 35.

FINANCING

Ralston Purina's stock buybacks and other financial strategies allow the company to keep improving its earnings per share. Page 3.

ROSAs, a new asset-backed security, are being pitched to U.S. institutional investors. Page 37.

INTERNATIONAL

Hughes Aircraft and PacTel are among the U.S. pension funds using protected equity notes as part of their overseas investment program. Page 1.

The Leicestershire City Council pension fund is giving allocation decisions to its balanced manager. Page 6.

REAL ESTATE

National Property Advisors employees took advantage of a voluntary separation offer to make a fresh start with another firm. Page 2.

Travelers Cos.' handling of withdrawal requests has angered investors in one of its realty funds. Page 2.

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Submission deadline passed

The deadline has passed for submitting completed questionnaires for *Pensions & Investments*' annual directory of international and global investment advisers, to be published June 25. If you have accounts invested overseas and would like to be placed on the mailing list for next year's survey, contact Christine Philip at (312) 649-5217.

Mass exodus at realty firm

NPA employees take money, seek new start

By Terry Williams

National Property Advisors is disbanding, the unintentional result of its parent company offering voluntary separation benefits to all employees.

But NPA employees plan to affiliate with another money manager and make a bid to continue managing a portion of the $300 million worth of industrial properties under management.

Pensions & Investments has learned employees of Atlanta-based NPA have been in contact with John Hancock Financial Services, Boston, to discuss a possible affiliation. "It is premature to say anything further," a Hancock spokesman said.

All but two of the 27 employees of NPA accepted the separation offer from National Life Insurance Co., Montpelier, Vt.

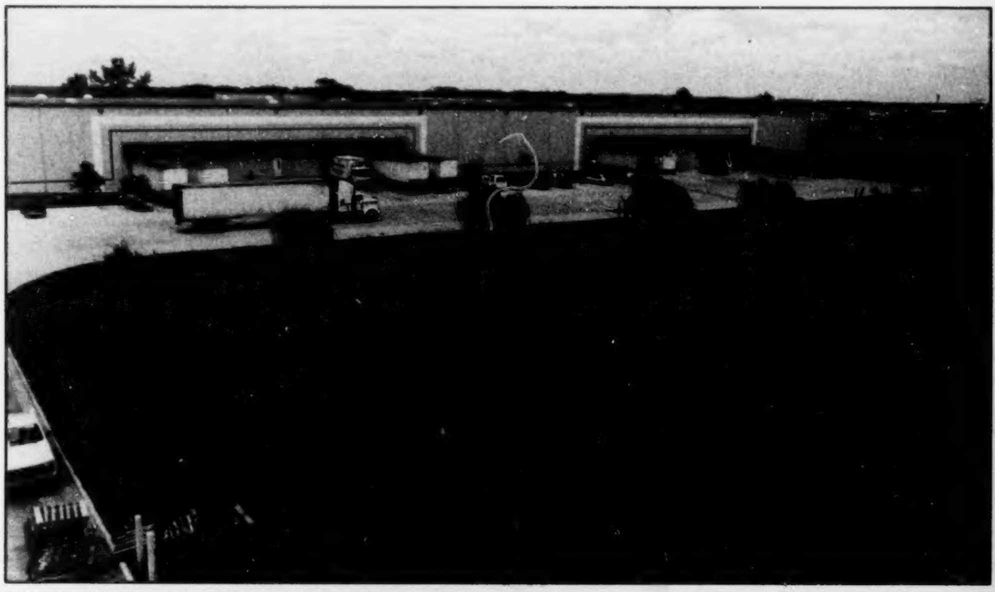
The offer followed a decision to downsize the insurer in an effort to cut expenses. Even though National Life executives did not believe NPA should be eliminated, they made the offer to all employees on the advice of attorneys, said Keniston P. Merrill, senior vice president and chief investment officer of National Life.

"Our thought was that they were a bunch of happy campers," Mr. Merrill said of the NPA staff. "We did anticipate some of the clerical people leaving. We did not think any significant number of professionals would take it. That's a chance you take."

Although terms of the separation plan weren't disclosed, Mr. Merrill said NPA staffers viewed the package as a "windfall."

Given the strong employment market in Atlanta, the employees

See **NPA** *on page 46*



Lakeland (Fla.) Distribution Center is among the properties managed by National Property Advisors, which is disbanding because most of its employees are leaving.

Change irks investors

Travelers alters fund liquidation method

By Fred Williams

DALLAS — The Dallas Police and Fire Pension Fund is threatening a lawsuit against The Travelers Cos., Hartford, Conn., to recover its $6 million investment in a Travelers Insurance Co. real estate fund now being liquidated.

An attorney for the Dallas fund questions whether the fund has enough assets to meet all withdrawal requests and whether Travelers' own pension fund — reportedly a participant in the commingled fund — would unfairly benefit from a change in the way Travelers plans to honor the requests.

The dispute keys on "unilateral changes" in the method used by Travelers to honor redemption requests from Separate Account R, an open-end commingled real estate fund, according to a Dallas attorney who represents the Dallas fund.

Several other pension funds — including the Maine State Retirement System, the Grand Rapids (Mich.) Police and Fire Pension Plan, and the Northeast Utilities Service Co. fund — also have expressed objections to the changes, said Gary B. Lawson, attorney with the Dallas law firm of Goodwin, Carlton & Maxwell.

Some investors, including the Dallas and Maine funds, have been waiting to recover their investments since 1986.

Mr. Lawson said Travelers has been uncooperative in providing information to investors, and changed the redemption process to a pro-rata one from a priority, or first-come-first-served basis as specified in the investment documents.

Both Mr. Lawson and Claude Perrier, executive director of the Maine State system, said a pro-rata payout eventually might be the most equitable method of liquidating the fund, but that a solution should involve investors as well as Travelers.

Mr. Lawson said some Separate Account R participants "believe a serious conflict of interests" might exist because Travelers' pension fund is believed to be a participant "and would benefit from the pro-rata approach over the existing first-come-first-served method."

In response, Travelers officials denied any impropriety involving Separate Account R, and said Mr. Lawson's allegations "are completely unfounded."

"Travelers understands its fiduciary responsibility to the investors in Separate Account R. We believe our actions regarding this account, which have been en-

See **Liquidation** *on page 46*

GM, Ford get lift from pension shift

By Barry B. Burr

General Motors Corp. and Ford Motor Co. both boosted their first-quarter earnings by changing pension assumptions.

GM increased its first quarter earnings by about 10%, or $75 million, to $710 million, by increasing its investment return assumption and reducing its mortality assumption.

Ford increased its earnings of $[illegible] million by $[illegible] million, or about [illegible]%, by raising its investment return assumption to 9% from [illegible].

In addition, GM didn't make a contribution to its defined benefit pension plans in 19[illegible], saving the company about $[illegible] billion, based on its contributions in recent years.

GM increased the investment return assumption of its pension fund to 11% from [illegible] and lowered the mortality assumption to project beneficiaries will die two years earlier than calculated for the pension plan. GM executives declined to give the age of life expectancy used for its assumptions.

See Earnings on page [illegible]

Ralston Purina launches 18th stock buyback

By Marlene Givant Star

ST. LOUIS — Ralston Purina Co. is implementing its 18th stock buyback in eight years, enabling the company to amass more of its outstanding shares than any other food producer.

The company also makes strategic use of abundant spare cash by boosting its stock through reducing the number of outstanding shares — a strategy some analysts support given what they say are limited investment opportunities.

Ralston Purina, which produces Purina pet foods and such household names as Eveready batteries and Wonder Bread, was one of the first to buy back its shares in the early 1980s and has amassed more than 50% of its shares outstanding, according to a report by Donaldson, Lufkin & Jenrette Securities Corp., New York.

Several institutional investors and analysts praised the company's strategy of giving something back to shareholders. They note three of the company's core businesses — pet food, batteries and baking — are growing very slowly and don't merit significant capital investment. Ralston Purina earned $422.5 million on net sales of $6.65 billion last year.

"Generically we like companies that buy back shares at a price less than the private market value," said Douglas R. Jamieson, executive vice president of GAMCO Investors Inc., New York. GAMCO began accumulating Ralston Purina in the fourth quarter of 1989, with a purchase of 79,000 shares.

Raisin Bran
Corn Chex
Wheat Chex
Rice Chex
Quick Oats
Crisp Crunch
Almond Delight
Freakies
Muesli
Puppy Chow
Purina Dog Chow
Kitten Chow
Smart Cat
Bran Flakes

Ralston Purina, maker of foods for people and pets, has earned high marks with its stock buybacks.

Because the company is viewed as having limited business opportunities, it's more aggressive about its financial ones. Increasing its stock price by reducing its shares outstanding is better than a strategy of growth through costly acquisitions that might not make sense, analysts said.

"Although Ralston's operating trends are dull as dishwater, the company continues to increase earnings per share by shrinking the number of shares outstanding. Ralston is currently generating about 5% of its market value in free cash flow after dividends and capital spending. Consequently, even though the company is fairly highly leveraged, it can keep repurchasing stock," the DLJ report said.

"Purina has a weird view of growth . . . They basically grow by shrinking their shares outstanding, sort of a novel approach," said William Leach, DLJ vice president and author of the April 30 report. He said the stock is "undervalued" and "very attractive."

Other financial strategies include the recent formation of an employee stock ownership plan to alleviate post-retirement health liabilities and the decision to pump cash into dividends. In the past 10 years, its dividend growth rate has increased 10% to 11% on a compound annualized basis, according to Lawrence Adelman, senior vice president of Dean Witter Reynolds Inc., New York.

"The market has expected a major acquisition," but there's been none so far, said Timothy Ramey, vice president and food industry analyst at County NatWest USA, New York.

In February 1989, Ralston expressed interest in the food businesses offered for sale by RJR Nabisco Inc. Although William P. Stiritz, chairman and chief executive officer, told analysts Ralston increasingly would turn to acquisitions for growth, the company didn't purchase the RJR properties.

Indeed, its acquisition strategy has been very selective as prices of targets have skyrocketed in the past three years. Most recently, Ralston Purina purchased Cofinea, a French holding company that owns two leading dry cell battery brands in France; bought the remaining interest it did not already own in Eveready Australia/New Zealand and the Beech-Nut baby food business from Nestle Enterprises Inc., the No. 2 brand in the United States.

The company is quiet about the financing strategies devised be-

See **Stock buyback** *on page 46*

PIPER winners find warmth in cold markets

Cash takes top international prize

By Margaret Price

As many key markets wallowed, cash was king in Pensions & Investments' Performance Evaluation Reports for the first quarter of 1990.

With a 3.58% return, the commingled global yield (or cash) fund of PCM International, Newark, N.J., bested all competitors in the PIPER universe of bank and insurance company commingled funds.

The first quarter was the second consecutive quarter in which cash outperformed equities and fixed-income in the global markets, according to Salomon Brothers Inc., New York. Before that, cash hadn't outperformed the other two classes since the third quarter of 1986.

Among the PIPER + universe of separately managed accounts, the international equity fund of CIGNA International Investment Advisors Ltd., London, won laurels among international funds for the quarter with a 1.13% gain, and the global fund of Scudder, Stevens & Clark, New York, topped all global funds with −0.36%.

PIPER + international funds
(periods ended March 31)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	1.13%	34.27%	27.56%	63.53%	29.54%
First quartile	−3.18	17.63	13.79	30.66	22.58
Median	−7.30	11.81	10.62	28.30	19.87
Third quartile	−9.78	3.23	5.85	26.41	18.69
Lowest return	−22.95	−15.47	0.44	15.75	14.16
FTA Euro/Pac	−19.88	−11.06	5.44	28.28	na
MSCI EAFE	−19.72	−11.35	5.03	28.27	20.94

PIPER + global funds
(periods ended March 31)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	−0.36%	24.80%	17.74%	34.24%	25.37%
First quartile	−2.28	19.00	10.27	24.82	24.32
Median	−4.57	12.75	8.50	21.78	18.86
Third quartile	−6.21	9.28	5.54	20.43	17.72
Lowest return	−13.10	−3.13	2.09	17.11	17.54
FTA World	−14.28	−1.55	6.18	22.08	na
MSCI World	−14.22	−1.78	5.86	21.87	18.71

In comparison, during the first quarter, the Morgan Stanley Capital International Europe Australia Far East Index fell 19.72%, while the MSCI World Index dropped 14.22% and the FT-A World Index fell −19.66%. The median PIPER + international fund returned −7.3% and the global fund, −4.57%. There is no median for the PIPER universe because of the diversity among funds. Data were compiled by Rogers, Casey & Associates, Darien, Conn.

A key factor hammering the indexes — and index fund performance — was the Tokyo market's plunge, illustrated by the 32.05% tumble of the Japanese component of EAFE during the quarter.

In the short term, avoiding Japan's market proved fortuitous for many top performers. As stocks and bonds suffered in the first quarter of this year, "cash was the place to be," said Jeffrey Brummette, director of fixed income at PCM International.

The firm's $47 million global yield fund pursued a strategy of investing primarily in short-term government securities or bank deposits in the United Kingdom and continental Europe. In the first quarter, between 65% and 75% of the fund was invested in European instruments, while about 20% of the fund consisted of U.S. cash.

During the second half of 1989, the fund had shifted its focus from Australia, New Zealand and Canada to Europe as interest rates rose amid continuing strong economic growth and continued inflation-fighting by European central banks.

CIGNA's nearly 6-year-old $245 million international fund,

See **Foreign** *on page 43*

Short sellers top special equity pack

By Curtis Vosti

The first quarter of the decade turned out to be the type the Feshbach Brothers of Palo Alto, Calif., like: the Standard & Poor's 500 Stock Index posted a loss.

The notorious short-selling brothers, Joe, Matt and Kurt, with partner Tom Barton, make bets on stocks they think are overvalued by at least 100%. When the market goes up, the Feshbachs expect to be down less than the market went up. When the market goes down, the firm expects to be up more than the market is down.

Their Southgate Partners fund, a limited partnership with $388 million in assets, was the top performing special equity fund among the 46 investment management firms in PIPER + not only for the quarter, but also for the one-, three- and five-year periods ended March 31.

According to partner Joe Feshbach, Southgate Partners contains about 200 issues from any place their intensive research determines overvalue.

"We tend to do shorts all across the board," he said. "Most markets, even weak markets, tend to have pockets of speculative excess." Banks have been a particular target in the last couple of years, as have biotech firms that played on hopes of a cure for AIDS, such as **Viratek Inc. Texas Air Corp.** was another winner for the strategy.

Southgate returned 14.8% for the quarter, 49.8% for the year, 47.44% for the three years and 44.37% for the five years. All returns for periods of more than one year are annualized.

In comparison, the median PIPER + returns for the respective periods were −1.86%, 6.24%, 4.88% and 10.78%. The S&P returns for the periods were −3.01%, 19.15%, 8.85% and 17.53%.

Among the 81 bank and insurance company commingled funds in the Pensions & Investments' Performance Evaluation Report — compiled by Rogers, Casey & Associates, Darien, Conn. — Texas Commerce Bank of Houston's $15 million special equity fund returned 5.42% for the quarter, topping the list and beating both the S&P and the Russell 2000, which returned −2.21%. The median was −2.86%.

Small companies in computer software and energy services fields helped the leading performance, according to Henry Lartique, portfolio manager.

"Money follows earnings in the stock market," Mr. Lartique said. A 100% turnover is normal for the about 40 stocks in the fund with a market cap of $400 million or less.

Winners for the fund in the first quarter included **Quiksilver Inc.** and **Oceaneering International Inc.**

The emerging growth fund of Princeton Bank and Trust, Morristown, N.J., was the best performing commingled fund for the 12-month period, with a 36.52% return. In comparison, the median PIPER return was 11.12%; the S&P 500, 19.15%; and the Russell 2000, 5.53%.

The $5 million fund contains around 20 issues, and has an average turnover of 50%, according to

See **Short sellers** *on page 46*

PEOPLE

‘Temp agency’ adds banker to list

■ Is it possible to turn a 24-hour-a-day job like investment banking into a family-friendly career?

Alterna-track, a New York-based executive search firm for temporary or part-time positions in the financial services industry, is striving to do just that with the addition as partner of Carol Curley, a former director in the investment banking area of Prudential-Bache Securities Inc.

Formed last November by working moms Suzanne Rinfret Moore, formerly a government bond saleswoman at J.P. Morgan Securities Inc., and Karen Cook, former vice president and the first female equity trader at Goldman, Sachs & Co., the firm has specialized in serving the needs of small corporations, investment advisers and boutiques.

Now it hopes to attract big commercial and investment banks by strengthening its thrust into corporate finance and investment banking — sort of a "temp agency" to the Street.

The firm's stable of 300 professionals, 90% of them women, have expertise in such fields as investment and commercial banking, law, brokerage, financial public relations and marketing.

"A lot of consolidation and layoffs have cut staffs down very deeply. Firms need very experienced people to work on whole transactions on administrative management, evaluation of companies for M&A and ESOPs, recruitment and training," Ms. Curley said.

Carol Curley, a former Pru-Bache executive, is a new partner at Alterna-track.

REAL ESTATE

L.A. County fund finds new home

Gateway Plaza will be the new home of the Los Angeles County pension fund, which paid $55 million for the suburban property.

■ Like some corporations, the $10.2 billion Los Angeles County Employees' Retirement Association is exiting a crowded, trouble-plagued downtown area for more serene space in the suburbs.

The fund paid $55 million for a 13-story, 300,000-square-foot office building, Gateway Plaza, in Pasadena, which will serve as new administrative offices.

The fund had outgrown the space it had been leasing in a county building in the core of downtown Los Angeles.

Although they could have remained downtown, the fund's staff and investment board chose to flee the downtown area for many of the same reasons some corporations have cited: crime, congestion and higher costs.

Charles Conrad, administrator for the fund, said Gateway Plaza is the largest building in Pasadena and probably will remain so. In March 1989, Pasadena voters passed an initiative that limits commercial growth to 250,000 square feet of office space a year, about 50,000 square feet less than the size of Gateway Plaza.

Because it has large floor plates, Gateway Plaza should be sought for rentals by big companies with good credit, considered a plus in the real estate industry, Mr. Conrad said. The pension fund is leasing about 80,000 square feet in the building.

FINANCING

Merrill leads underwriting derby

■ Merrill Lynch Capital Markets posted the highest underwriting volume during the first four months of 1990, with $16.1 billion, up from $15.9 billion a year ago.

Merrill Lynch had a 16.7% share of the total U.S. domestic securities market, according to IDD Information Services, New York. For the year ended April 30, Merrill Lynch ranked first with $46.3 billion in underwriting volume and a 14.6% market share.

Total U.S. underwriting volume during the first four months of 1990 was $96.4 billion, up 9.2% from the same period a year ago.

Combined underwriting volume for the top five firms during the first four months increased $1.9 billion — 3.4% — from the same period in 1989, but their market share fell 3.3 percentage points because of the entry of smaller, more specialized firms.

Top 5 underwriters
(Jan. 1-April 30)

	$ bils.	Market share (%)
Merrill Lynch	16.1	16.7
Goldman, Sachs	12.5	12.9
Morgan Stanley	11.2	11.7
Salomon Brothers	9.9	10.3
First Boston	8.0	8.3

Source: IDD Information Services, New York

While the debt market volume was up $3.5 billion to $86.3 billion in the first four months of this year, its share of the overall market dropped to 90% from 94%. The junk bond market virtually has disappeared, according to IDD, with only $400 million issued to date. For the year ended April 30, junk bond volume was $18.9 billion, compared with $28.6 billion the previous year.

RATINGS

1990 starts off with a flurry of downgrades

■ More bad news for corporate issuers.

Credit rating downgrades of U.S. corporations outpaced upgrades by a factor of four to one in the first quarter of 1990, according to Moody's Investors Service Inc.

And the pace isn't likely to abate during the remainder of the year.

The New York-based rating agency attributed the credit quality slide to declines in real estate values and the imposing debt obligations of many speculative-grade companies.

Credit ratings for 95 companies were lowered and 23 were upgraded. The sharpest declines occurred among financial institutions.

MERCHANT BANKS

No dark clouds loom over Schroders

■ While most U.S. brokerage firms are reporting less than stellar results at home and abroad amid a slowdown in their bread-and-butter businesses, profits at Schroders PLC, the U.K. merchant bank, rose 55% in 1989.

The bank's corporate finance, money management and international capital markets operations all turned in strong performances. Profits were $75 million (46.6 million pounds), up 55%. Earnings per share rose 55% to $236.96 (148.1 pounds). Financial controller D.J.H. Morris said corporate finance and money management operations together contributed more than 50% of earnings.

In recent years Schroders has refocused business activities, redirected capital resources and pushed into new lines of business to generate diverse earnings streams. In 1989, corporate finance was the largest contributor to earnings, and money management was the second largest contributor, according to Mr. Morris.

The firm's capital base was increased by three new investors — Bank of Boston, Massachusetts Mutual Life Insurance Co. and The Mitsubishi Trust & Banking Corp. — which each bought a 4.9% interest.

INTERNATIONAL

Small stocks fared better in quarter

■ During the first quarter, foreign small-cap stocks overall took it on the chin, but not as badly as the broader international arena.

For the first quarter, the bottom decile by market capitalization of the FT-Actuaries Europe and Pacific Index fell 15.16% compared with −19.88% return by the full index, said Sudip Thakor, assistant vice president, Travelers Investment Management Co., Hartford, Conn. TIMCO manages $70 million in a commingled international small-capitalization stock fund.

Thus, while international investments generally "weren't as good a place to be in the first quarter," investors in international small-cap stocks "lost a lot less money than if they had invested in a broader market index," he said.

For the year ended March 31, foreign small-cap investors fared better. For the 12 months, the bottom decile by market cap of the FT-A EuroPac rose 0.94% compared with a return of −11.07% by the full index.

TIMCO introduced its foreign small-cap stock fund in September 1989.

For the six-month period ended March 31, the fund posted −10.66% compared with −10.57% by the bottom decile of the FT-A EuroPac and a brutal −16.04% by the broader index.

INVESTING

7 years bad luck for equity firms

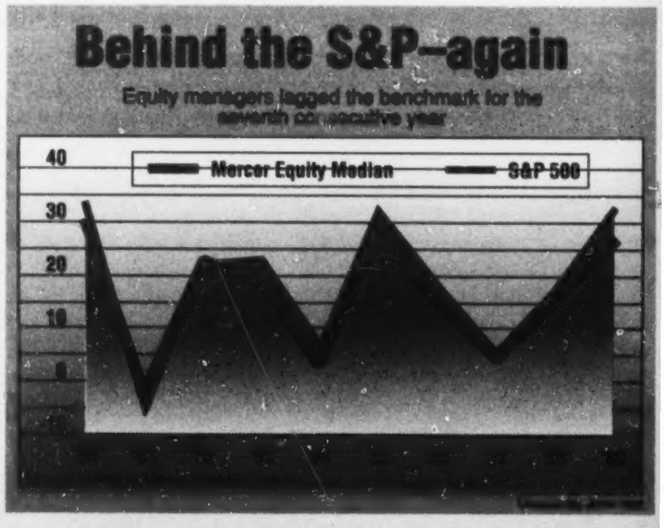
■ Stock managers lagged the Standard & Poor's 500 Stock Index for the seventh year in a row last year, according to a survey by William M. Mercer Asset Planning Inc.

In 1989, the survey of 122 bank and insurance company investment managers showed a median return of 26.5% — a far cry from the 31.7% chalked up by the S&P. The S&P's return outpaced more than three-quarters of the managers in the Mercer survey.

The sample median return trailed the S&P every year in the 1980s except 1981 and 1982. For the entire decade, the Mercer equity median returned 16.5% on a compound annualized basis, compared with 17.6% for the S&P.

For the future, 58% of the managers surveyed expected a flat economy in 1990, while 33% predicted a mild recession.

In addition, 36% believe the Dow Jones industrial average will fall below 2600 by year end; another 26% think the Dow will be between 2,600 and 2,799; 22%, between 2,800 and 3,000; and an optimistic 16% think the widely followed stock market barometer will top 3,000.



Advisers stick to guns in search for quality

By Fred Williams

Quality and discipline were the ommon characteristics of the top performing portfolios in the PIPER + universe for the first uarter.

The quality theme combined with unstable economic and market conditions propelled an enhanced money market fund to the op position in the PIPER + fixed-income universe for the uarter.

"Cash did much better than bonds in the first quarter," said Seymour N. Lotsoff, chief investment officer of Lotsoff Capital Management, Chicago. The firm's 500 million enhanced income und finished the quarter with a eturn of 2.45%.

Mr. Lotsoff said the fund is a money market fund that uses options arbitrage positions on Treaury bonds. Approximately 38 basis points of the first-quarter eturn was added by the arbitrage program, he said, with the balance of the underlying income generated through money market nstruments.

The median fixed-income fund eturned −0.69% for the quarter nd the Shearson Lehman Hutton Government/Corporate Bond ndex, −1.14%.

Bridgewater Asset Management, Wilton, Conn., topped the PIPER + fixed-income list for the 2 months and five years ended March 31 with respective returns of 15.9% and 18.11%. The median fund returned 10.91% and 11.61% for the respective periods, while the index returned 11.7% and 11.28%. All returns for periods of more than one year are annualized.

Harris Investment Management, Chicago, was the best performing fixed-income manager for the 10 years ended March 31 with a return of 17.18%, compared with 13.12% for the median and 13.09% for the index.

Scott Gerwitz, research analyst at Bridgewater, said the $200 million fund usually is invested in either 30-year T-bonds or cash. "We add value through duration management rather than sector rotation," he said. Bridgewater was in T-bonds most of 1989 and in cash most of January, "in and out" of bonds in February and in cash for the first part of March, he said.

For the first quarter, the median equity manager in the PIPER + universe returned −2%. Equity managers did better for longer terms, with median returns of 17.11% for the 12 months, 17.22% for the five years and 19.39% for the 10 years ended March 31. In contrast, the Standard & Poor's 500 Stock Index returned 19.15%, 17.53% and 17.7% respectively.

Dawson Samberg Capital Management, Southport, Conn., was the leading equity manager for the quarter and for the year with returns of 10.7% and 67.54% respectively.

C.H. Brown Co., Minneapolis, topped the performance lists for the five- and 10-year periods with returns of 29.4% and 29.65%, respectively.

Richard Halverson, principal with C.H. Brown, said the firm uses a computer-directed investment approach but does not classify it as quantitative.

He said the computer is used to analyze financial and market data and to group stocks into clusters based on quality, earnings momentum and current market valuations. The computer selects the three highest ranking clusters from which portfolios of 30 stocks are selected.

"It has aspects of tactical asset allocation but is unique in many ways. The system really is a balancing of fundamentals on one side and momentum on the other," he said. "It is designed to spot internal movements of the market and move with it."

He said the model has been out of equities since October 1989 and was out of the market for most of 1988.

He said stocks have been from a wide variety of sectors, but technology issues were beneficial in the early part of the 1980s along with consumer staples.

Among PIPER + balanced and tactical asset allocation funds the quality and discipline themes also

See **Quality** on page 20

PIPER + equity funds
(periods ended March 31)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	10.70%	67.54%	66.75%	29.40%	29.65%
First quartile	−0.42	20.85	10.34	19.01	21.68
Median	−2.00	17.11	8.71	17.22	19.39
Third quartile	−3.39	11.51	6.70	15.16	17.91
Lowest return	−19.40	−6.60	−6.44	7.49	11.68
S&P 500	**−3.01**	**19.15**	**8.35**	**17.53**	**17.70**

PIPER + fixed-income funds
(periods ended March 31)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	2.45%	15.92%	11.02%	18.11%	17.18%
First quartile	0.31	11.83	7.78	12.32	14.07
Median	−0.69	10.91	7.34	11.61	13.12
Third quartile	−1.30	9.23	6.69	10.53	12.57
Lowest return	−4.76	−6.07	3.49	8.32	10.52
SLH G/C	**−1.14**	**11.70**	**6.99**	**11.28**	**13.09**

PIPER + special equity funds
(periods ended March 31)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	14.88%	49.80%	47.44%	44.37%	23.56%
First quartile	−0.23	13.25	8.73	14.35	16.35
Median	−1.86	6.24	4.88	10.78	14.27
Third quartile	−4.08	−0.90	2.65	10.28	13.28
Lowest return	−9.63	−12.40	−1.02	7.96	12.40
S&P 500	**−3.01**	**19.15**	**8.85**	**17.53**	**17.70**
Russell 2000	**−2.21**	**5.54**	**1.38**	**9.51**	**15.84**

Real estate funds top inflation rate

By Terry Williams

Commingled real estate funds managed by Schroder Real Estate Associates and State Street Bank & Trust Co. posted the highest return on investment for the five years ended Dec. 31, according to the Pensions & Investments' Performance Evaluation Report.

For the one-year period, open-end and closed-end funds sponsored by John Hancock Financial Services posted the highest returns.

The median return on investment for open-end funds for the year was 8.04%; closed-end funds returned 7.21% for the same period. For the five years, open-end funds returned 8.7% and closed-end funds returned 9.61%.

In comparison, the Consumer Price Index rose 4.76% for the year and 3.69% for the five years. All returns for periods of more than one year are annualized.

PIPER data are compiled by Rogers, Casey & Associates, Darien, Conn.

John Hancock's closed-end Forestree I fund and its open-end separate accounts fund, which also buys forestland, were No. 1 for the year. Forestree I, with assets of about $126 million, had a return of 20.24%; the $589.3 million separate accounts fund posted returned 41.68%.

Richard N. Smith, portfolio manager with Boston-based John Hancock, attributed the high return of the separate accounts fund to advantageous purchases.

"Timberland does not generate those returns normally. . . . When we come out of the acquisition phase, we will see returns more in line with what timber usually does, which is 10% to 15%," he said.

Acquisition of timberland in the Pacific Northwest in particular contributed to the strong returns, according to Mr. Smith. Of the five separate accounts, one is heavily concentrated in that part of the country, he said.

"The Pacific Northwest is the strongest performing market right now," Mr. Smith said. "We see it continuing over the next few years."

The Forestree fund is a more balanced portfolio with 60% of its land in the South and 40% in the Northwest, according to Mr. Smith.

Forestree I has a 10-year lifespan and, as it reaches the midpoint, is in the disposition phase, Mr. Smith said. The fund already has sold two properties, at a 30% premium of appraised value.

Returns also will be buoyed by the opening and expansion of pulp and paper mills in Alabama and Mississippi, according to Mr. Smith.

For the five years, the leading funds were Schroder's open-end Real Estate Composite fund with 14.41% and State

See **Realty** on page 20

Growth stays in limelight

High-yield bonds prove superior during longer terms

By Leonard J. Hoilie

Growth stock portfolios maintained their top standings in the PIPER equity universe as the expected turnaround in value stocks failed to materialize during the first quarter of 1990.

In fixed income, high-yield funds moved to the end of the spectrum, leading only in the long term as mortgage-based bond funds led in both short- and medium-term categories.

For the quarter and the year ended March 31, the Standard & Poor's 500 Stock Index returned −3.01% and 19.15%, respectively. The median equity fund in the Pensions & Investments' Performance Evaluation Report returned −2.22% for the quarter and 16.68% for the year.

In the fixed-income market, the Shearson Lehman Hutton Government/Corporate Bond Index returned −1.14% for the quarter and 11.7% for the year.

PIPER returns reflect the performance of bank and insurance company commingled funds and are compiled by Rogers, Casey & Associates, Darien, Conn. All return figures for periods greater than one year are annualized.

For the quarter, CoreStates Investment Advisers Inc.'s Growth Fund was first, returning 3.3%.

"The kinds of stocks we invest in have high earnings rates," said Timothy G. Connors, managing director for equity services at Philadelphia-based CoreStates, about the $205 million fund.

"We also entered the year with higher cash levels than we usually have, at about 15%, and we began to deploy cash in the latter part of the quarter as the opportunity arose," he said.

Some of the stocks in the portfolio include **Boeing Co.** and such small-capitalization technology stocks as **Autodesk Inc.**, **Automatic Data Processing Inc.** and **Structural Dynamics Research Corp.**

Mr. Connors said the firm also was successful with **Liz Claiborne Inc.**, **Dreyer's Grand Ice Cream Inc.** and **Medical Care International Inc.**

Shearson Lehman Hutton Trust Co.'s Flexible Growth 7 fund led all 337 pooled equity funds for the year ended March 31, returning 38.8%.

Larry Tashjian, executive vice president for Provident Investment Counsel, Pasadena, Calif., which is the adviser to the $5 million Shearson fund, said stocks in the fund have continued to do well in a slow growth economy. "The market pays for predictability," he said. Some of the stocks in the portfolio include **Toys "R" Us Inc.**, **Wal-Mart Stores Inc.**, **Waste Management Inc.** and **L.A. Gear Inc.**

In the five-year returns, Sun Bank Capital Management's Equity Fund placed first, returning 25.06% on a compound annua-

See **Limelight** on page 18

PIPER equity funds
(periods ended March 31)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	3.30%	38.80%	16.80%	25.06%	26.06%
First quartile	−1.14	20.24	9.57	17.44	18.25
Median	−2.22	16.68	8.16	15.94	17.10
Third quartile	−3.06	13.11	6.21	14.35	15.53
Lowest return	−6.17	−9.19	−13.91	3.27	11.65
S&P 500	**−3.01**	**19.15**	**8.85**	**17.53**	**17.70**

PIPER special equity funds
(periods ended March 31)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	5.42%	36.52%	18.45%	28.88%	21.86%
First quartile	−0.72	16.75	9.89	15.96	18.96
Median	−2.06	11.12	5.70	13.25	16.27
Third quartile	−4.80	7.46	2.89	10.50	13.12
Lowest return	−9.99	−7.68	−4.27	4.45	10.83
S&P 500	**−3.01**	**19.15**	**8.85**	**17.53**	**17.70**
Russell 2000	**−2.21**	**5.54**	**1.38**	**9.51**	**15.84**

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Limelight

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lized basis.

For the five-year period, the S&P 500 returned 17.53%; the median PIPER equity fund advanced 15.94%.

Anthony Gray, president of Sun Bank Capital, Orlando, Fla., said the reason for the $700 million fund's success was, "we buy large successful companies and trade actively." Some of the stocks in the portfolio include **Wal-Mart**, **General Electric Co.**, **PepsiCo Inc.**, **Procter & Gamble Co.** and **Merck & Co. Inc.**

For the 10 years, the $23.2 million Capital Appreciation Fund managed by Pacific Financial Asset Management Corp., Newport Beach, Calif., placed first with an annualized 26.06%. Sun Bank's Equity Fund was second, returning 25.55% on an annualized basis.

The S&P 500 returned 17.7% during the 10 years ended March 31; the median PIPER equity fund advanced 17.1%.

Betsy Moore, a spokeswoman for Pacific Financial, said the fund's managers look for positive fundamentals such as earnings momentum and re-investment rates, and also are looking for reasonable valuations such as expected price-earnings ratio, dividend yield and price to book value. "We try to avoid surprises," she said. Some of the stocks in the portfolio include **Adobe Systems Inc.**, **Novell Inc.** and **Compaq Computer Corp.**

Among the 303 funds in PIPER's fixed-income universe, The Mercantile Bank of Joplin, Mo.'s Collective Investment Fund F bested the field in both the quarter and one-year periods, returning 2.71% and 19.9% respectively.

Thomas Atteberry, chief investment officer for Mercantile Bank, said timing was one of the reasons for the success of the $5 million portfolio, which had been concentrating on 15-year mortgages purchased last year and on home loans from the Farm Credit Bureau. "We were aggressive in going long term last year, then we were offensive in the fall and stayed short term," he said.

For the five years, the Employee Benefit Income Fund of Meridian Investment Co., Wilmington, Del., was first, returning an annualized 14.93%.

The Shearson Lehman Hutton index returned 11.28% for the five years ended March 31; the median PIPER fixed-income fund returned 10.84%.

Kenneth Holmes, Meridian vice president, said the fund's performance, "gained great value from participation in AAA mortgage realty securities." The average quality of the $24 million portfolio is rated AA+, with more than half of the portfolio rated AAA. Mr. Holmes said, however, the portfolio will be lessening its position because that market sector is weakening and the spreads are becoming less attractive. "We will be doing more with mortgage financing and Treasuries," he said.

In 10-year returns, First Variable Life's Separate Account D-2 fixed-income fund was first, returning an annualized 15.7%.

For the 10-year period, the Shearson Lehman Hutton index advanced 13.09%; the median PIPER fixed-income fund returned 12.39%.

"We bought for the long term and have under a 20% turnover rate," said Rebecca H. Garner, about the $2 million, high-yield First Variable fund.

Ms. Garner, vice president of Associated Capital Investors, the San Francisco-based investment vehicle for Monarch Capital Corp., which owns First Variable Life, said the fund's success came from the fact that "we don't trade around much, we buy and hold. And, we only buy coupons." She also said having 25% of the portfolio in cash helped boost performance in a market that does not favor high-yield bonds. ■

Pensions & Investments will profile global custody/master trust and custodial banks in the Oct. 1 issue.

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Realty

Continued from page 17

Street Bank and Trust Co.'s closed-end Real Estate I fund, which posted a 16.34% return.

State Street's fund is managed by Aldrich, Eastman & Waltch, Boston.

PIPER's measurement of Schroder's performance included the returns of a closed-end fund, a publicly traded property fund listed on the exchanges in Paris and Amsterdam and two separate account agreements, according to John Emmanuel, senior vice president.

The $430 million North American Property Unit Trust, an open-end fund through which British pension funds invest in the United States and a part of the Schroder composite, is most representative of Schroder's philosophy to buy underused property and add value to it, said Mr. Emmanuel.

It had a five-year return 19% and a property mix of about 75% retail and 25% office.

Mr. Emmanuel attributed NAPUT's return to retail properties held in the trust.

During the first half of the 1980s, office buildings outperformed shopping centers, according to Mr. Emmanuel. But in the past four years, retail properties had a return on investment that was three to four times the Russell-NCREIF Index average, he said.

During the mid-1980s, Schroder capitalized on the high prices syndicators were paying for office properties in the Southeast and Southwest and redeployed money into property in the Northeast and West.

"It was a good time to capture profits and move on to other areas with more attractive risk-return relationships," Mr. Emmanuel said. "We saw the specter of overbuilding in the Southeast and the Southwest.

"We also deployed a lot of cash into major capital improvement programs. We did numerous expansion and refurbishing of office and shopping centers over the last five to six years.

"Ninety percent of what we did is buy property with value enhancement potential," Mr. Emmanuel said.

"We are active owners. We acquire with intent to create value."

The closed-end AEW-State Street Real Estate I fund manages $62.3 million of property. Of that amount, 61% is office, 28% is industrial and 11% is residential. ▪

Quality

Continued from page 17

were apparent.

The top performing PIPER+ balanced manager in the first quarter was Harris Bretall Sullivan & Smith Inc., San Francisco, with a return of 2.2%. For most of the quarter, the asset allocation for the $189 million in balanced fund assets was 65% equities and 35% fixed.

Lauryn Bierdeman, vice president, said the equity portion has been weighted heavily toward economically sensitive stocks, technology stocks, capital goods, basic industry and chemicals.

Portfolio stocks tend to be high quality and growth oriented, she said, and include such names as **Emerson Electric Co.**, **General Electric Co.**, **Compaq Computer Corp.**, **Mentor Graphics Corp.**, **Intel Corp.**, **Motorola Inc.** and **Johnson & Johnson**.

The fixed-income portion is focused on two- to five-year Treasury instruments, she said.

"We use the equity for growth and the fixed income to control volatility and provide income," she said.

For the five years, the best performing balanced/TAA funds were tactical asset allocators with strong disciplined computerized approaches to investing.

Chancellor Capital Management, New York, was No. 1 for the five years with 23.69%. Hunt Whitbeck, vice president, said the fund uses stocks and T-bills in a model it calls "Stockshift 200." In the model, the equity portion can range "between zero and 200%" using leverage and taking long positions in stock index futures.

The system is based on a core index fund of equities from which Chancellor may go long or short in stock index futures "to get us where we want to go."

"We've made our money by being long in up markets and under 100% (equities) in falling markets," he said. In order to increase equity exposure to 200%, "cash is used to buy stock index futures to achieve equivalent equity exposures as if you were over 100% invested."

The PIPER+ universe contains 420 equity, 222 fixed-income and 163 balanced/TAA funds managed by investment counseling firms. The universe is compiled by Rogers, Casey & Associates, Darien, Conn. ▪

Top two deciles PIPER+ equity funds

3-month returns

	%
Dawson Samberg (Gro. Pequot)	10.7
Securities Res. (Kemper Summit)	7.1
Securities Res. (Putnam Voyager)	6.5
Friess Assoc. (Brandywine)	5.9
Granahan Invst. (Explorer II)	5.9
Dawson Samberg (Rep. A/C)	5.5
Friess Assoc.	4.4
Presidio Mgmt. (Geary Partners)	4.4
Securities Res. (Nat'l)	4.0
Provident Invst. (Stellar)	3.5
Delta Financial (Growth)	3.4
Fred Alger Mgmt. (Small cap.)	3.0
Mesirow Asset Mgmt. (Small cap.)	3.0
Harris Bretall Sullivan & Smith	2.6
Securities Res. (Dreyfus Growth)	2.5
Red Oak Assoc.	2.4
One Federal Asset	2.3
Wall Street Assoc. (Sm. cap. gro.)	2.3
Birmingham Capital	2.3
Gateway Advisors (Index plus)	2.2
C.H. Brown (Computer)	2.1
Pilgrim, Baxter, Greig (Small cap.)	2.0
Webster Capital (Max return)	1.9
Lynch & Mayer (Growth)	1.9
Mitchell Hutchins (Uncom. value)	1.6
Fiduciary Mgmt. Assoc.	1.6
Frontier (Trad. gro.)	1.4
First Security Mgmt.	1.4
Donald Smith & Co.	1.4
Peregrine Capital (Agg./sm. cap.)	1.2
General American (Closed-end)	1.1
Federated Invst.	1.1
Jundt/Capen Assoc. (Small-cap.)	1.1
Sterling Capital	0.9
IDS Equity Advisors	0.8
Franklin Asset Mgmt.	0.8
Baring America Asset (Trad.)	0.7
Cowen Asset Mgmt. (Small cap.)	0.7
Lincoln Capital Mgmt.	0.7
Dawson Samberg (Growth)	0.6
John Stewart Darrell	0.6
Pacific Century (Em. gro./sm.)	0.5
Nicholas-Applegate (Growth)	0.5
PRIMECAP Mgmt.	0.4
Lehman Ark Mgmt.	0.3
CMB Invst. Counselors	0.2
Jundt/Capen Assoc. (Large cap.)	0.2
Trust Co./West	0.1
Renaissance Invst. (Disc.)	0.1
Waddell & Reed Asset (Agg.)	0.1

Continued on page 22

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Cumberland Advisors	0.0
Analytic Invst. Mgmt. (Hedged)	0.0
Lehman Ark (Garp)	0.0
Mitchell Hutchins (Core growth)	0.0
Beekman Capital Mgmt. (Gro.)	0.0
Waddell & Reed Asset (Core)	-0.1
S&P 500	**-3.0**

1-year returns

	%
Dawson Samberg (Gro. Pequot)	67.5
Provident Invst. (Stellar)	41.6
Fred Alger Mgmt. (Sm. cap)	41.0
Pilgrim, Baxter, Greig (Sm. cap.)	35.7
Dawson Samberg (Rep. A/C)	34.5
Cheswick Invst.	34.1
Frontier (Trad. gro.)	33.0
Securities Res. (Putnam Voyager)	32.9
Wilke/Thompson (Emerg. growth)	32.2
Provident Invst.	31.6
Jundt/Capen Assoc. (Small cap.)	31.4
Jundt/Capen Assoc. (Lg. cap.)	30.3
Rainier Invst. (E)	30.2
Lynch & Mayer (Growth)	29.9
Presidio Mgmt. (Geary Partners)	29.6
Lincoln Capital	29.1
General American (Closed-end)	29.1
Investors Res. (20th cen. gro.)	28.6
Pacific Century (Em. gro./sm.)	28.1
Friess Assoc. (Brandywine)	28.0
IDS Equity Advisors	28.0
Friess Assoc.	27.7
Wall Street Assoc. (Sm. cap. gro.)	27.7
Trust Co./West (Special)	27.4
Janus Capital	27.2
Beacon Invst.	27.1
Miller/Howard Invst. (AMP)	26.7
Leylegian Invst.	26.5
IDS Eq./Emerging Growth	26.5
Wilke Capital (Core growth)	26.5
Nicholas-Applegate (Growth)	26.3
Investors Res. (20th cen. sel.)	25.8
Dawson Samberg (Growth)	25.6
CMB Invst. Counselors	25.6
Mt. Auburn Mgmt.	25.4
Nelson, Benson & Zellmer	24.9
Sunbank Capital (Suntrust)	24.8
Mass. Financial (Low vol.)	24.7
Columbus Circle Investors	24.4
Value Line (Standard)	24.3
J & W Seligman (Growth)	24.2
Baring America Asset	24.2
Goldman Asset (Segt. linked)	24.1
Securities Res. (Kemper Summit)	24.0
Kemper Asset	23.3
Kahn Bros. Asset (D)	23.2
Peregrine Capital (Agg./sm. cap.)	23.2
Tukman Capital (Active)	23.0
Trust Co./West	22.9
Scudder Stevens Clark (Qual.)	22.8
Securities Res. (Nat'l)	22.8
Lehman Ark (Spec. sit.)	22.6
INVESCO Trust (Defensive)	22.5
Invst. Advisers (156720)	22.4
Delta Financial (Growth)	22.3
Sirach Capital	22.2
S&P 500	**19.2**

5-year returns

	%
C.H. Brown (Computer)	29.4
Wilshire Asset (Lg. co. growth)	28.9
Crescent Capital (Enhance index)	26.7
Cadence Capital (Small cap.)	26.6
Jundt/Capen (Small cap.)	23.6
Combined Capital (Quality growth)	23.3
Breau Capital	23.2
Frontier (Sm. cap.)	23.1
Invst. Res. (Max. gro. strat.)	22.9
Balch Hardy Scheinman	22.9
Friess Assoc.	22.8
Pacific Century (Em. gro./sm.)	22.8
Davis, Weaver & Mendel	22.6
Ariel Capital (Growth/value)	22.6
Pennsylvania Invst. (Dyn. value)	22.4
Beacon Invst.	22.3
Cheswick Invst.	22.2
Argus Investors (Lg. cap. divers.)	22.1
Leylegian Invst.	22.1
Securities Res. (Dreyfus Growth)	21.8
Cadence Capital (Lg. cap.)	21.7
DeJarnette Invst.	21.7
Columbus Circle Investors	21.6
Institutional Capital	21.4
First Security	21.2
Waddell & Reed Asset (Core)	20.9
Investors Res. (20th cen. gro.)	20.7
Kahn Bros. Asset (D)	20.7
Geewax Terker (H.Q. growth)	20.7
Equinox Capital (U.S.)	20.5
Dietche & Field Advisers	20.4
Nicholas-Applegate (Growth)	20.3
PRIMECAP Mgmt.	20.3
Invst. Advisers (Small cap.)	20.2
Red Oak Assoc.	20.2
Lynch & Mayer (Growth)	20.1
MSR Advisors (Technical)	20.0
Lincoln Capital	20.0
Putnam Cos. (Emerg. growth)	20.0
Mitchell Hutchins (Core value)	19.9
Friess Assoc. (Brandywine)	19.8
Severn Assoc. (I)	19.8
Brinson Partners	19.7
Caldwell & Orkin	19.7
Tukman Capital (Active)	19.6
Capital Growth	19.6
Invst. Counselors	19.5
Delta Financial (Growth)	19.5
Putnam Cos. (Spec. growth)	19.5
S&P 500	**17.5**

10-year returns

	%
C.H. Brown (Computer)	29.7
Nicholas-Applegate (Emerg. gro.)	28.9
Friess Assoc.	28.4
Wall Street Assoc. (Sm. cap. gro.)	27.6
Severn Assoc. (I)	27.3
Friess Assoc. (Brandywine)	27.0
Balch Hardy Scheinman	26.9
Cadence Capital (Large cap.)	26.1
GAMCO Investors (ERISA)	25.9
Securities Res. (Dreyfus Growth)	25.5
Delta Financial (Growth)	25.5
Ashland Mgmt.	25.4
Wilshire Asset (Sm. co. value)	25.4
Cedar Hill (Value)	25.0
Brandywine (Low p/e II/sm. cap.)	24.6
Caldwell & Orkin	24.2
Jundt/Capen (Small cap.)	24.1
Geewax Terker	24.0
Hellman, Jordan	24.0
Capital Growth	23.8
Miller Anderson Sherrerd (Sm.)	23.3
Columbus Circle	23.1
R.B. Haave Assoc.	23.1
First Security	23.0
Tukman Capital (Active)	23.0
Eagle Asset	22.9
Geewax Terker (Sect. rotation)	22.9
Geewax Terker (H.Q. growth)	22.8
Invst. Res. (Max. gro. strat.)	22.7
S&P 500	**17.7**

Top two deciles PIPER + fixed-income funds

3-month returns

	%
Lotsoff Capital (Enhanced inc.)	2.5
Chemical Invst. (Money mkt.)	2.1
Hoisington Invst.	2.1
Gabelli O'Connor (Act. cash)	2.1
Glickenhaus & Co.	2.0
Chandler & Chambless (Short)	1.8
Shelby County Gov't	1.7
Consistent Asset (5-year)	1.7
Delta Financial (Quant.)	1.6
Cumberland Advisors (Plus cash)	1.6
Wilmington Trust (Bench. 7-year)	1.4
Wilmington Trust (Bench. 3-year)	1.4
Income Research (Enhanced cash)	1.3
Chase Invst.	1.3
Discount Corp. of New York (Liq.)	1.2
Wilmington Trust (Bench. 5-year)	1.2
IDC Portfolio Mgmt. (Insured trip)	1.2
Merganser Capital	1.2
Brundage, Story & Rose	1.1
Consistent Asset (Total return)	1.1
IDC Portfolio (2-year trip)	1.1

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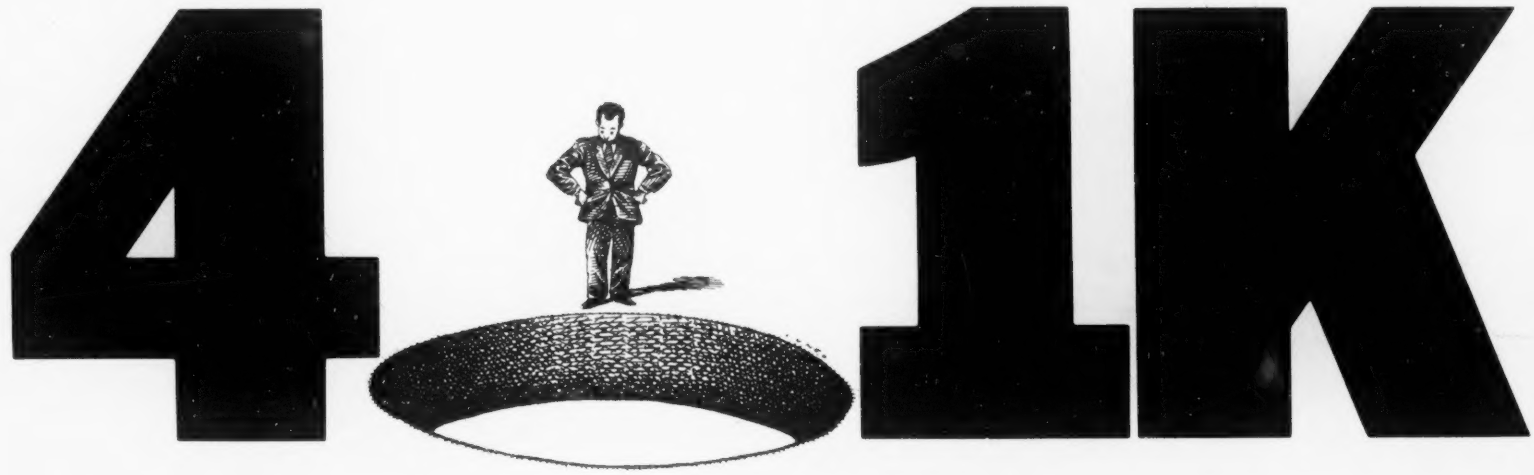

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Peregrine Capital (Total return)	1.0
Longfellow Invst. (Short dur.)	1.0
Criterion Invst. (Ltd. mat. 2-5 yr.)	1.0
Standish, Ayer & Wood (Cont. risk)	1.0
STW Fixed Income (Short comp.)	1.0
Analytic Invst. (Enhance cash I)	1.0
Capitalcorp (Active 0-5)	0.9
Wells Fargo Invst. (1-3 yr. gov't)	0.9
Wilkinson Boyd (Enhance ltd. dur.)	0.8
SLH G/C	**1.1**

1-year returns

	%
Bridgewater Asset (Mkt. timing)	15.9
McKee Invst.	15.5
Waddell & Reed (Mgd. tot. ret.)	14.4
Wolf Webb Burk Campbell (Ant.)	13.8
Davis Hamilton (Inter.)	13.7
STW Fixed (Long)	13.4
Durkee Capital (Act. quant)	13.2
Income Research & Mgmt. (Long)	13.1
J & W Seligman	13.0
Haven Capital	12.8
Standish, Ayer & Wood (Act. core)	12.7
Standish, Ayer & Wood (SA free)	12.7
Security Capital (Long term)	12.7
Keystone Invst. (Tot. return)	12.6
Analytic Invst. (Plus)	12.5
Capital Guardian	12.5
Panagora Asset (Enhance bench.)	12.5
Van Kampen Merritt (En. bench.)	12.5
WR Lazard (Structured)	12.4
Invst. Advisers (Act. dur.)	12.4
Munder Capital (Active)	12.4
Putnam Cos. (Horizon mgmt.)	12.3
Federated Invst.	12.2
Aetna Life (Cap. weighted)	12.2
Cooke & Bieler	12.2
Mellon Capital (Cap. index)	12.1
Invst. Counsel (Inter.)	12.1
STW Fixed Income (Short comp.)	12.0
Wood, Struthers & Winthrop	11.9
SLH G/C	**11.7**

5-year returns

	%
Bridgewater Asset (Mkt. timing)	18.1
McKee Invst.	15.9
STW Fixed Income (Long comp.)	15.7
Hoisington Invst.	15.5
Huff Asset	14.8
Wolf Webb Burke Campbell (Ant.)	14.6
Consistent Asset (Tot. ret.)	14.3
Waddell & Reed (Mgd. tot. ret.)	14.0
Durkee Capital (Act. quant)	14.0
Denver Invst. (Long)	13.8
Ferguson & Wellman (Rate antic.)	13.8
Loomis, Sayles (Disc.)	13.3
Pacific Invst. (Total return)	13.1
NWQ Invst.	13.1
Signet Asset (Enhanced)	13.0
Harris Invst.	12.9
Western Asset (Long term)	12.9
Greenwich Asset	12.8
Trust Co./West (Convert.)	12.8
Standish, Ayer & Wood (Act. core)	12.8
Loomis, Sayles (Invst. grade)	12.7
Freedom Capital	12.7
Kemper Asset (Plus)	12.6
Peters, Gamm, West & Vincent	12.6
SLH G/C	**11.3**

10-year returns

	%
Harris Invst.	17.2
Consistent Asset (Tot. ret.)	17.0
STW Fixed Income (Long comp.)	16.2
Wolf Webb Burk Campbell (Ant.)	15.7
Western Asset (Long term)	15.6
Trust Co./ West (Convert.)	15.5
Loomis, Sayles (Disc.)	15.1
Wilmington Trust (Bench 7-year)	15.0
Greenwich Asset	14.9
Standish, Ayer & Wood (Act. core)	14.9
Denver Invst. (Long term)	14.8
Hoisington Invst.	14.8
Denver Invst. (Strat.)	14.5
Loomis, Sayles (Invst. grade)	14.5
Lincoln Capital	14.4
Invst. Advisers (20 ltd. dur.)	14.3
SLH G/C	**13.1**

Top two deciles PIPER + special equity funds

3-month returns

	%
Feshbach Bros. (Southgate)	14.9
MacKay-Shields (Convert. value)	2.1
Equitable Capital (Convert.)	2.0
Sullivan Money Mgmt. (High yield)	1.0
Gateway Invst. (Dividend)	1.0
Davis Dinsmore (Bancroft convert.)	0.9
Pacific Century (Convert.)	0.7
Russell 2000	**−2.2**
S&P 500	**−3.0**

1-year returns

	%
Feshbach Bros. (Southgate)	49.8
IDC Portfolio Mgmt. (Utility)	25.6
W.H. Reaves (Utility energy)	25.0
Axe-Houghton (Emerg. growth)	23.8
S&P 500	**19.2**
Pacific Century (Convert.)	16.7
Brinson Partners (Post venture)	15.5
Lynch & Mayer (Convert.)	13.7
Russell 2000	**5.5**

5-year returns

	%
Feshbach Bros. (Southgate)	44.4
W.H. Reaves (Utility energy)	19.2
Cramer Rosenthal McGlynn	18.8
S&P 500	**17.5**
IDC Portfolio Mgmt. (Utility)	17.4
Pacific Century (Convert.)	16.3
Russell 2000	**9.5**

10-year returns

	%
Cramer Rosenthal McGlynn	23.6
IDC Portfolio Mgmt. (Utility)	19.5
S&P 500	**17.7**
Harris Invst. (Convert.)	17.1
Trust Co./West (Convert.)	16.4
Russell 2000	**15.8**

Top two deciles PIPER + balanced/TAA funds

3-month returns

	%
Harris Bretall Sullivan Smith	2.2
Wells Fargo Invst. (Three-way)	1.1
Fiduciary Mgmt. Assoc. (Balanced)	1.0
Sterling Capital (Eq. asset alloc.)	0.8
Thomas J. Herzfeld (Bal./hedged)	0.4
Chancellor (Bondshift)	0.2
Lincoln Capital (Balanced)	0.1
Lehman Ark (Basic value bal.)	0.1
Rainier Invst. (Balanced)	0.1
Baring America Asset (Balanced)	0.0
Federated Invst. (Balanced)	−0.1
IDS Trust (Balanced 50/80)	−0.1
Standish Ayer Wood (Bal. act.)	−0.1
Cooke & Bieler (Balanced)	−0.1
First Bank Milwaukee	−0.2
Capitoline Invst. (Balanced)	−0.2
Morgan Stanley (Balanced)	−0.2
Gary Wheaton Bank (Balanced)	−0.3
Chancellor (Stockshift 50)	−0.3
Bartlett & Co. (Balanced value)	−0.4
Capital Trust (Balanced)	−0.4
Brundage, Story & Rose (Bal.)	−0.4

1-year returns

	%
Provident Invst. (Balanced)	25.5
Frontier Capital (Balanced)	21.6
J & W Seligman (Balanced)	21.2
Starbuck, Tisdale & Assoc.	21.0
Lincoln Capital (Balanced)	20.7
Furman Selz Capital (Balanced)	20.6
IDS Eq./Fixed Income (Balanced)	20.5
Institutional Capital (Balanced)	20.4
Baring America Asset (Balanced)	19.9
IDS Trust (Balanced 50/80)	19.9
Rainier Invst. (Balanced)	19.3
Cheswick Invst. (Balanced)	18.8
Caldwell & Orkin (Balanced)	18.3
QuantiLogic Asset (TAA)	18.0
Bankers Trust (TAA-active)	17.8
Fred Alger Mgmt. (Balanced)	17.7
Kemper Asset Mgmt. (Balanced)	17.7
Investment Advisers (Balanced)	17.5
Harris Bretall Sullivan Smith	17.3
Davis Hamilton (Balanced)	17.3
IDS Trust (Balanced 35/65)	17.3
J.P. Morgan Invst. (TAA)	17.1

5-year returns

	%
Chancellor (Stockshift 200)	23.7
First Quadrant (Tactical)	21.7
Institutional Capital (Balanced)	20.6
TSA Capital (Strat. TAA)	20.4
Bankers Trust (TAA-active)	19.2
Investment Counselors (Bal.)	18.4
TSA Capital (50/50)	18.4
Chancellor (Assetshift 65)	17.8
Mellon Equity Assoc. (Quant)	17.7
J.P. Morgan Invst. (TAA)	17.7
Provident Invst. (Balanced)	17.6
Lincoln Capital (Balanced)	17.4
Mellon Capital (3-way)	17.3
Starbuck, Tisdale & Assoc.	17.2
IDS Eq. Fixed Income (Balanced)	17.0
IDS Trust (Balanced 50/80)	17.0
NWQ Invst. Mgmt. (Balanced)	16.8
Bessemer Trust (Balanced)	16.8
Caldwell & Orkin (Balanced)	16.8

10-year returns

	%
First Quadrant (Tactical)	24.8
Kirr, Marbach (Balanced)	21.7
TSA Capital (Strat. TAA)	20.6
Mellon Capital Mgmt. (3-way)	20.6
Davenport & Co. of Va. (Bal.)	20.4
First Bank Milwaukee	20.1
Caldwell & Orkin (Balanced)	19.8
Chancellor (Assetshift 65)	19.5
Fidelity Mgmt. (Balanced)	19.3
Provident Invst. (Balanced)	19.3
Wells Fargo Invest. (Three-way)	19.2
J.P. Morgan Invst. (TAA)	19.2

PIPER + global equity funds

3-month returns

	%
Scudder Stevens Clark	−0.4
Marvin & Palmer	−0.7
Capital Guardian (New pers. F)	−0.7
Scudder Stevens Clark	−0.9
IDS Int'l	−1.4
Burgess Capital	−2.1
MSCI World	**−14.2**
FTA World	**−14.3**

1-year returns

	%
Scudder Stevens Clark	24.8
Ivory & Sime Int'l (3)	24.5
Burgess Capital	24.4
AIG Global Investors	22.7
Scudder Stevens Clark	21.6
Capital Guardian (New pers. F)	20.2
FTA World	**−1.6**
MSCI World	**−1.8**

5-year returns

	%
WorldInvest	34.2
Schroder Capital (X)	27.8
Brinson Partners	25.2
Credit Suisse Asset	25.1
FTA World	**22.1**
MSCI World	**21.9**

10-year returns

	%
Burgess Capital (Comp.)	25.4
MSCI World	**18.7**

PIPER + international equity funds

3-month returns

	%
CIGNA Asset	1.1
Morgan Stanley (S. Butt/EAFE)	1.0
Grantham Mayo (Quant.)	0.6
Lazard Freres Asset	0.4
Baillie Gifford (NCNB Texas)	0.0
Grantham Mayo (Active)	−0.6
Wellington Trust (Emerg.)	−0.9
Rowe Price-Fleming (Discovery)	−1.4
Marvin & Palmer	−1.7
Walter Scott Int'l	−1.8
Templeton Invst. Counsel	−2.2
Scudder Stevens Clark (ERISA)	−2.3
Scudder Stevens Clark	−2.5
Murray Johnstone Int'l	−2.5
Rowe Price-Fleming (Disc.)	−2.9
MSCI EAFE	**−19.7**
FTA Europe & Pacific	**−19.9**

1-year returns

	%
Rowe Price-Fleming (Discovery)	34.3
Schroder Capital (Small cos.)	32.5
CIGNA Asset	30.5
Morgan Stanley (S. Butt/EAFE)	26.7
Gantham Mayo (Quant.)	24.4
Lazard Freres Asset	23.4
Wellington Trust (Emerg.)	22.9
UBS Phillips & Drew Int'l	22.5
Scudder Stevens Clark	22.4
Baillie Gifford (NCNB Texas)	21.8
Globe Finlay (EAFE)	21.2
Grantham Mayo (Active)	20.7
Scudder Stevens Clark (ERISA)	20.6
GE Invst.	20.0
Alliance Capital (Active)	19.0
FTA Europe & Pacific	**−11.1**
MSCI EAFE	**−11.4**

5-year returns

	%
Mellon-Pictet (Pos. value uncon.)	63.5
Marsh & Cunningham (Castegren)	38.5
Morgan Stanley (S. Butt/EAFE)	36.1
Scudder Stevens Clark (ERISA)	33.5
WorldInvest (IPEF)	33.3
Grantham Mayo (Quant.)	32.3
Scudder Stevens Clark	32.0
Globe Finlay (EAFE)	31.7
GE Invst.	31.2
MSCI EAFE	**28.3**
FTA Europe & Pacific	**28.3**

10-year returns

	%
Marsh & Cunningham (Castegren)	29.5
Pacific Financial (EFF)	25.6
Bankers Trust Invst.	22.7
MSCI EAFE	**20.9**

Top two deciles PIPER commingled equity funds

3-month returns

	%
CoreStates (Growth), Pa.	3.3
First Nat'l of Tulsa, Okla.	2.4
Gary Wheaton Bank (Hedged), Ill.	2.4
Shawmut Bank, Mass.	2.3
Shawmut Bank (All. eq.), Mass.	2.0
Continental Capital, Ill.	2.0
United Capital, Colo.	1.9
First Asset Mgmt. (II), Minn.	1.8
SW Nat'l Bank of Pa.	1.7
Lincoln Nat'l (Select), Ind.	1.6
IDS Trust (Core growth), Minn.	1.1
Princeton Bank, N.J.	1.1
SLH Trust (Flex growth 7), Del.	0.9
Planters Nat'l (Growth), N.C.	0.9
The Phoenix, Conn.	0.9
Mercantile Bank Joplin (E), Mo.	0.7
First Tennessee Invst.	0.5
Commercial Capital (Spec. gro.)	0.5
Security Nat'l, W.Va.	0.5
Chicago Title & Trust	0.5
Security Nat'l (II), W.Va.	0.5
State Street Bank (CM02), Mass.	0.5
New York Life (SA 1)	0.4
Central Bank, La.	0.4
IDS Trust, Minn.	0.4
Union Labor Life (SA A), D.C.	0.3
Mutual of New York (Divers.)	0.3
SLH Trust (Dir. 1), Del.	0.2
Sovran Capital, Va.	0.2
United Carolina Bank, N.C.	0.1
Wheeling Dollar Bank, W.Va.	0.1
PW Trust (Conserv.), N.J.	0.1
Hamilton Bank. Pa.	−0.1
Stock Yards Bank, Ky.	−0.1
Travelers (SA Dr.), Conn.	−0.2
Wheeling Dollar Bank (B), W.Va.	−0.2
State Bank (C), Ohio	−0.3
Wilmington Trust-Tremont (Gro.)	−0.3
Valley Nat'l (I), Ariz.	−0.3
First Fidelity (Sel. value), N.J.	−0.3
Chancellor (Multifact)	−0.4
Nat'l Bank of Detroit	−0.4
Union Central, Ohio	−0.4
Merchants Nat'l (I), Ind.	−0.5
Provident Mutual (SA 1), Pa.	−0.5
Pacific NW Trust, Ore.	−0.5
Mercantile Bank Joplin (Gro. C)	−0.5
Meridian, Pa.	−0.6
Sunburst Bank, Miss.	−0.6
Mercantile Bank, Mo.	−0.6
Fifth Third Bank-Miami, Ohio	−0.6
The Phoenix (Growth S), Conn.	−0.7
Connecticut Mutual	−0.7
First City-Houston (A-1), Texas	−0.7
Minnesota Mutual (Growth)	−0.8
Colorado Nat'l Bank	−0.8
S&P 500	**−3.0**

1-year returns

	%
SLH Trust (Flex growth 7), Del.	39.4
Princeton Bank, N.J.	36.8
Chancellor (Select growth)	32.7
Lincoln Nat'l (Select), Ind.	31.5
Commercial Capital (Sp. gro.)	30.7
IDS Trust (Core growth), Minn.	28.1
The Phoenix (Growth S), Conn.	27.6
Chancellor (Styleshift)	27.5
Bank One Wisconsin (Growth)	26.5
First City-Houston (A-1), Texas	26.5
Mark Twain Bank, Mo.	26.3
Fidelity Mgmt. (Earn. gro.), Mass.	26.1
Riggs Nat'l Bank, D.C.	25.2
Fidelity Mgmt. (Income), Mass.	25.1
First Kentucky Trust	25.0
Chancellor (Growth)	24.9
Hibernia Nat'l (A), La.	24.8
Sun Bank, Fla.	24.8
Bank of New York	24.7
PW Trust (Growth/value), N.J.	24.7
Aetna Life (SA 2), Conn.	24.6
Mercantile Bank, Mo.	24.5
First Asset Mgmt. (II), Minn.	24.3
Merchants Nat'l (2), Ind.	23.9
Equitable Capital (No. 4), N.Y.	23.9
First Wis. Asset (Growth A)	23.7
Hibernia Nat'l (G), La.	23.6
Fidelity Mgmt. (Agg.), Mass.	23.5
CoreStates Invst. (Growth), Pa.	23.4
Wheeling Dollar Bank, W.Va.	23.3
State Street Bank (Matrix syn.)	23.3
Puget Sound Nat'l, Wash.	23.2
Merchants Nat'l (I), Ind.	23.0
Hamilton Bank, Pa.	23.1
Mercantile Bank Joplin (E), Mo.	23.0
Chancellor (Indexplus)	23.0
IDS Trust, Minn.	23.0
Johnson County Bank, Kan.	22.5
Connecticut Mutual	22.5
American Nat'l Chicago (Active)	22.4
Summit Trust, N.J.	22.4
Great West (VAAA), Manitoba	22.1
Equitable Capital (No. 1), N.Y.	22.1
Beverly Trust, Ill.	22.0
NBD Trust, Ill.	21.8
Imperial Trust, Calif.	21.8
Shawmut Bank, Mass.	21.7
First Variable Life, Ark.	21.7
Chicago Title & Trust	21.7
First Bank Milwaukee	21.5
Valley Fidelity, Tenn.	21.5
State Street Bank (CM02), Mass.	21.5
Assoc. Manitowoc, Wis.	21.4
Metropolitan Life (SA 40), N.Y.	21.3
Commercial Capital, Ark.	21.3
Wheeling Dollar Bank (B), W.Va.	21.2
S&P 500	**19.2**

5-year returns

	%
Sun Bank, Fla.	25.1
Chancellor (Select growth)	22.6
SLH Trust (Flex growth 7), Del.	22.3
Pacific Financial (Inc.), Calif.	22.2
State Bank (C), Ohio	22.1
Fidelity Mgmt. (Agg.), Mass.	22.1
State Street Bank (Matrix syn.)	21.9
Fidelity Mgmt. (Inc.), Mass.	21.8
South Carolina Nat'l	21.7
Pacific Financial (Cap. appre.)	21.7
IDS Trust (Core growth), Minn.	21.1
First Nat'l of Amarillo, Texas	20.0
Bank One Wisconsin (Disc.)	19.9
Bank of New York	19.8
State Street Bank (CM 02)	19.6
IDS Trust, Minn.	19.3
Puget Sound Nat'l, Wash.	19.1
United Capital Mgmt., Colo.	19.1
Wheeling Dollar Bank (B), W.Va.	19.0
American Nat'l Chicago (Active)	19.0
Assoc. Bank Neenah (Inc.), Wis.	19.0
First Fidelity (Sel. value), N.J.	18.9
Assoc. Bank Neenah, Wis.	18.9
Capital Trust (I), Ore.	18.9
Assoc. Manitowoc, Wis.	18.8
Meridian, Pa.	18.8
Southtrust Bank, Ala.	18.8
Chancellor (Indexplus)	18.4
Summit Trust, N.J.	18.4
Chase-CMB (Stock & fut. index)	18.3
Harris Trust (Systematic), Ill.	18.3
Valley Nat'l (I), Ariz.	18.2
First Fidelity, N.J.	18.2
Equitable Capital (No. 4), N.Y.	18.1
U.S. Nat'l Bank, Texas	18.1
Sovran Capital, Va.	18.1
Morgan Guaranty (Lg. co.), N.Y.	18.0
FirsTier Bank Omaha, Neb.	17.9
Bank One Wisconsin (Growth)	17.9
First Illinois (Corp.)	17.9
CREF, N.Y.	17.8
Travelers (SA 500), Conn.	17.8
First Security Nat'l (D), Ky.	17.7
Bankers Trust (Index), N.Y.	17.7
First Illinois (Personal)	17.7
S&P 500	**17.5**

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10-year returns

	%
Pacific Financial (Cap. appre.)	26.1
Sun Bank, Fla.	25.6
First Fidelity (Sel. value), N.J.	22.1
Pacific Financial (Divers. low p/e)	21.4
First Nat'l of Amarillo, Texas	21.1
Manufacturers Life, Ontario	21.1
Provident Mutual (SA 10), Pa.	21.0
United Capital Mgmt., Colo.	20.8
U.S. Nat'l Bank, Texas	20.5
Chancellor (Value), N.Y.	20.4
First NH Invst. (A)	20.3
Connecticut Mutual	20.3
First Interstate of Oklahoma	20.1
Manufacturers Affil. (Growth)	20.1
Manufacturers Detroit (E)	20.1
Union Labor Life (SA A), D.C.	20.0
American Nat'l Chicago (Active)	19.9
State Street Bank (CM02)	19.9
Guardian Insurance (VA 1), N.Y.	19.8
Lake Shore Nat'l, Ill.	19.7
The New England (Sep. cap. gro.)	19.6
Equitable Capital (No. 4), N.Y.	19.5
Wheeling Dollar Bank (B), W. Va.	19.3
Markston Invst. Mgmt, N.Y.	19.2
First Nat'l of Omaha (D), Neb.	19.1
Colorado Nat'l Bank	19.0
MTrust (Growth), Texas	19.0
Bank of New York	19.0
Provident Capital, Pa.	18.9
Assoc. Bank Neenah, Wis.	18.9
Massachusetts Mutual	18.8
Alias (Variable/total)	18.7
Dominion Trust (Corp.), Va.	18.7
Dauphin Deposit (Corp.), Pa.	18.5
S&P 500	**17.7**

Top two deciles PIPER commingled fixed-income funds

3-month returns

	%
Mercantile Bank Joplin (F), Mo.	2.7
General American Life (SA 6), Mo.	2.3
Dominion Trust (Stable capital), Va.	2.2
IDS Trust (GIC), Minn.	2.2
SW Nat'l Bank of Pa.	2.1
Capital Trust (GIC), Ore.	2.1
Central Fidelity (Cap. pres.), Va.	2.1
IDS Trust (Cash mgmt.), Minn.	2.1
Hawaiian Trust (Defensive)	2.1
Signet Trust (Stable value), Va.	2.1
Commerce Bank (Cap. pres.), Mo.	2.1
First Interstate of Wisconsin	1.9
Dauphin Deposit (Short), Pa.	1.8
Chase-CMB (Short-inter.), N.Y.	1.4
Wilmington Trust, Del.	1.3
Connecticut Mutual (Basis)	1.3
American Nat'l Bank, Ind.	1.3
MTrust, Texas	1.3
Bankers Trust (Govt./agency), N.Y.	1.2
First Nat'l/Amarillo (Inter.), Texas	1.2
American Nat'l Bank, Ind.	1.1
Bank One Wisconsin (Inter.)	1.1
Ameritrust (Reserve.), Ohio	1.1
Central Fidelity Bank (Short), Va.	1.0
Mercantile Safe (Inter.), Md.	1.0
Crestar Bank (Short), Va.	1.0
New York Life (SA 5)	0.9
IAA Trust (Govt. G), Ill.	0.8
Jefferson Trust, Ill.	0.8
Trustmark Nat'l, Miss.	0.8
Michigan Nat'l	0.8
Continental Bancorp, Pa.	0.8
AmSouth (Ltd. mat.), Ala.	0.8
Security Nat'l Bank, W.Va.	0.8
Bankers Trust (B), N.Y.	0.8
Bank of the West, Calif.	0.8
Wellington Trust (Inter.), Mass.	0.7
Shawmut Bank (Inter.), Mass.	0.7
Gary Wheaton Bank, Ill.	0.6
First Interstate of Okla. (Inter.)	0.6
Valley Fidelity, Tenn.	0.6
Union Central, Ohio	0.6
American Nat'l Chicago (Inter. plus)	0.6
Pioneer Bank, Ill.	0.6
Prudential Realty (VCA 8), N.J.	0.5
Central Bank, La.	0.5
Security Nat'l Bank (II), W. Va.	0.5
Assoc. Bank Neenah, Wis.	0.4
Fifth Third Bank Toledo, Ohio	0.4
SLH G/C	**−1.1**

1-year returns

	%
Mercantile Bank Joplin (F), Mo.	19.9
Jefferson Trust, Ill.	14.3
First Nat'l/Amarillo, Texas	13.8
Bankers Trust (Mtg. pass), N.Y.	13.8
Equitable Capital (No. 5), N.Y.	13.7
SLH Trust (Dir. 5), Del.	13.6
Ameritrust (Rt. GNMA), Ohio	13.6
First Nat'l of Maryland	13.5
Bank of New England	13.2
Harris Trust, Ill.	13.1
Chancellor (Mtg. secur.)	12.9
Chase-CMB (Index), N.Y.	12.8
The Principal, Iowa	12.7
Bessemer Trust, N.Y.	12.7
LaSalle Nat'l (Govt. corp.), Ill.	12.7
Johnson County, Kan.	12.7
INB Nat'l Bank, Ind.	12.6
Fidelity Mgmt. (Dynamic mat.)	12.6
Chase-CMB (Sec. mtg.), N.Y.	12.6
First Wachovia, N.C.	12.5
Aetna Life (Shares/tot.), Conn.	12.5
Barnett Bank, Fla.	12.5
Old Second Nat'l (HR 10), Ill.	12.5
CoreStates Invst., Pa.	12.4
Citizens Fidelity (F), Ky.	12.4
Crestar Bank (Roanoke), Va.	12.4
Nat'l City Cleveland, Ohio	12.4
IAA Trust (B), Ill.	12.3
Midlantic, N.J.	12.3
Prudential Rg./Asset (BMI)	12.3
First Variable Life (H.Q.), Ark.	12.3
Union Labor Life (SA G), D.C.	12.3
Wellington Trust (Enhanced)	12.3
Liberty Nat'l, Ky.	12.2
American Nat'l Bank, Ind.	12.2
Crestar Bank (5821), Va.	12.2
New York Life (SA 8)	12.2
Boatmen's Trust (F), Mo.	12.2
LaSalle Nat'l (Inter. govt.), Ill.	12.2
First Nat'l of Omaha (C), Neb.	12.1
Mellon Bond, Pa.	12.1
Assoc. Manitowoc (High), Wis.	12.1
Sanwa Bank (C), Calif.	12.1
FirsTier Bank Omaha, Neb.	12.1
Aetna Life (SA 76), Conn.	12.1
American Nat'l St. Paul, Minn.	12.1
Key Trust Co. of NW, Wash.	12.1
Chancellor (Inter.)	12.0
Manufacturers Detroit (F)	12.0
SLH G/C	**11.7**

5-year returns

	%
Meridian-Pa., Del.	14.9
United Capital, Colo.	14.8
Equitable Capital (No. 5), N.Y.	14.6
Boatmen's Trust (F), Mo.	14.3
Transamerica Life (SA T-2), Calif.	14.2
Sunburst Bank, Miss.	13.9
Beverly Trust, Ill.	13.7
The Principal, Iowa	13.4
First Variable Life, Ark.	13.4
LaSalle Nat'l (Gov't/corp.), Ill.	13.2
First Nat'l of Amarillo, Texas	12.9
General American Life (SA 9), Mo.	12.8
Bankers Trust (Mtg. pass), N.Y.	12.8
Crown Life (U.S.), Ontario	12.7
IAA Trust (B), Ill.	12.7
Harris Trust, Ill.	12.6
Travelers Cos. (SA P), Conn.	12.6
Fidelity Mgmt. (Dynamic mat.)	12.6
Metropolitan Life (SA 41), N.Y.	12.6
Morgan Guaranty, N.Y.	12.6
ASB Capital, D.C.	12.5
Fidelity Bank, Pa.	12.5
Society Nat'l, Ohio	12.4
First Interstate of Calif. (Mgd.)	12.4
Pacific Financial, Calif.	12.4
First Kentucky Trust	12.4
Sovran Capital, Va.	12.3
Sanwa Bank (C), Calif.	12.3
Aetna Life (Shares/tot.), Conn.	12.3
First Interstate of Arizona	12.3
Crestar Bank (Roanoke), Va.	12.3
Manufacturers Life (B), Ontario	12.2
CoreStates Invst., Pa.	12.1
Johnson County Bank, Kan.	12.1
Prudential Rg./Asset (Privest)	12.1
First Wachovia, N.C.	12.0
Mutual of New York (Priv. place.)	12.0
Aetna Life (SA 76), Conn.	11.9
Bank of New England	11.9
CIGNA (Active), Conn.	11.9
Nat'l Bank of Commerce, Neb.	11.9
Bessemer Trust, N.Y.	11.9
Marine Midland, N.Y.	11.9
Comerica, Mich.	11.9
SLH G/C	**11.3**

10-year returns

	%
First Variable Life, Ark.	15.7

Continued on page 30

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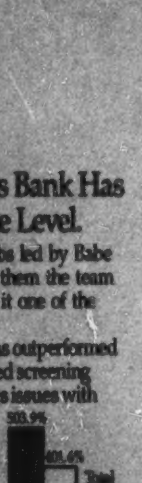

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Continued from page 28

Sovran Capital, Va.	14.9
United Capital Mgmt., Colo.	14.9
Beverly Trust, Ill.	14.8
Boatmen's Trust (F), Mo.	14.6
First Kentucky Trust	14.6
Life of Virginia	14.5
Meridian-Pa., Del.	14.4
Sanwa Bank (C), Calif.	14.3
ASB Capital Mgmt., D.C.	14.1
Pacific Financial, Calif.	14.1
Society Nat'l, Ohio	14.0
Crestar Bank (Roanoke), Va	13.9
First Interstate of Calif. (Mgd.)	13.9
Mutual of New York (Priv. place.)	13.9
First Nat'l of Amarillo, Texas	13.8
IAA Trust (B), Ill.	13.8
Travelers Cos. (SA D), Conn.	13.8
Morgan Guaranty, N.Y.	13.8
Bankers Trust (A), N.Y.	13.7
Prudential Rg./Asset (Privest)	13.7
First Interstate of Arizona	13.7
CIGNA (Inter.), Conn.	13.7
First Wachovia, N.C.	13.6
Marine Midland, N.Y.	13.6
Johnson County Bank, Kan.	13.5
Aetna Life (Shares/tot.), Conn.	13.4
First Nat'l of Maryland	13.4
Equitable Capital (No. 5), N.Y.	13.4
Central Fidelity Bank (Mgd.), Va.	13.4
Key Trust, N.Y.	13.3
State Street Bank (CM03)	13.3
SLH G/C	**13.1**

Top two deciles PIPER special equity funds

3-month returns

	%
Texas Commerce	5.4
Assoc. Bank Neenah (Cap. app.)	3.9
First City Houston (G-1), Texas	3.2
Equitable Capital (Growth 3), N.Y.	1.9
Princeton Bank (Em. gro.), N.J.	1.1
Deposit Guaranty (Opp.), Miss.	1.0
Liberty Nat'l (Growth), Ky.	0.6
Meridian (Quest), Pa.	0.5
First Asset Mgmt. (II), Minn.	0.0
SLH Trust (Growth 2), Del.	−0.2
SeaFirst (Northwest), Wash.	−0.3
BancOklahoma Trust	−0.3
Metropolitan Life (SA 43), N.Y.	−0.3
First Wachovia (Div. cap. gro.)	−0.5
Russell 2000	**−2.2**
S&P 500	**−3.0**

1-year returns

	%
Princeton Bank (Em. gro.), N.J.	36.5
Equitable Capital (Growth 3), N.Y.	32.9
Trust Co. of the West, Calif.	27.4
IDS Trust (Em. growth), Minn.	26.9
Lincoln Nat'l Invst. (Opp.), Ind.	24.5
Chancellor (Em. health), N.Y.	24.4
MTrust (Growth), Texas	22.6
SeaFirst (Northwest), Wash.	22.2
First Wisconsin Asset (Growth B)	22.2
Comerica, Mich.	21.8
Texas Commerce	21.0
Meridian (Quest), Pa.	20.3
Crestar Bank, Va.	19.8
Puget Sound (Win), Wash.	19.5
S&P 500	**19.2**
Russell 2000	**5.5**

5-year returns

	%
SLH Trust (Growth 2), Del.	28.9
SLH Trust (New values 3), Del.	27.9
Pacific Financial (Sm. cap.)	26.5
Assoc. Bank Neenah (Reg.), Wis.	20.5
Meridian (Quest), Pa.	19.8
Putnam (Growth), Mass.	19.5
Chase-CMB (Med. cap.), N.Y.	19.5
Equitable Capital (Tang. asset)	18.8
Trust Co./West, Calif.	18.0
SLH Trust (Small cap. 5), Del.	18.0
S&P 500	**17.5**
Russell 2000	**9.5**

10-year returns

	%
Provident Capital, Pa.	21.9
MTrust (Growth), Texas	20.6
First Asset Mgmt. (II), Minn.	20.3
First Wisconsin Asset (Growth B)	20.1
S&P 500	**17.7**
Russell 2000	**15.8**

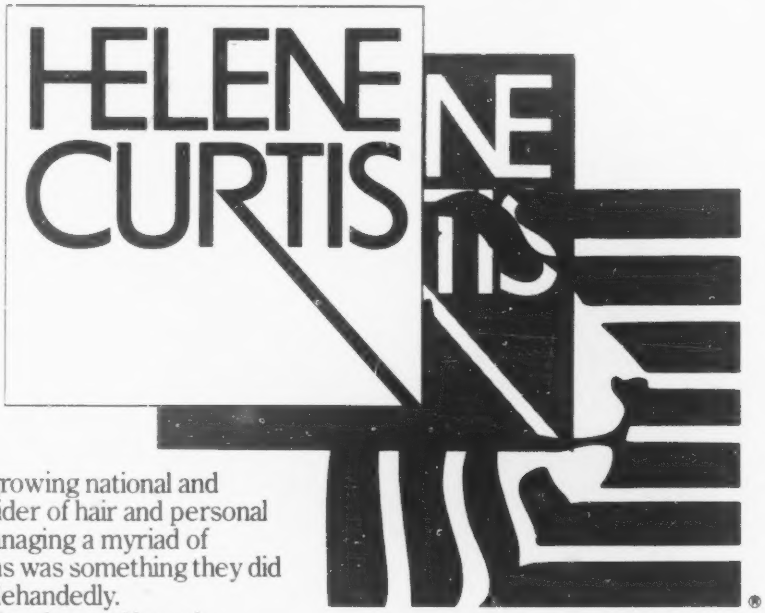
PIPER commingled international funds

3-month returns

	%
PCM Int'l (Global yield), N.J.	3.6
CIGNA (Eq.), Conn.	1.1
IDS Int'l (Eq.), Minn.	0.8
NCNB Nat'l (Stock), N.C.	−0.7
Wellington Trust (Emerg. stock)	−0.9
Fidelity Mgmt. (Overseas eq.)	−1.1
Citicorp (Fixed), N.Y.	−1.3
Morgan Guaranty (Bond), N.Y.	−1.5
Travelers Cos. (SA W), Conn.	−2.3
IAA Trust (CTF-I), Ill.	−3.5
Wellington Trust (Stock)	−3.7
PCM Int'l (Global bond), N.J.	−3.8
Assoc. Bank Neenah (World)	−3.8
Putnam Cos. (Eq.), Mass.	−4.0
CL Capital Mgmt. (Stock), Ga.	−4.0
The Principal (Stock), Iowa	−4.3
PCM Int'l (Print 2 eq.), N.J.	−5.6
Chase-CMB (Fixed), N.Y.	−5.9
Wilmington Trust (Eq.), Del.	−5.9

Continued on page 32

Who did Helene Curtis turn to for styling their Master Trust?



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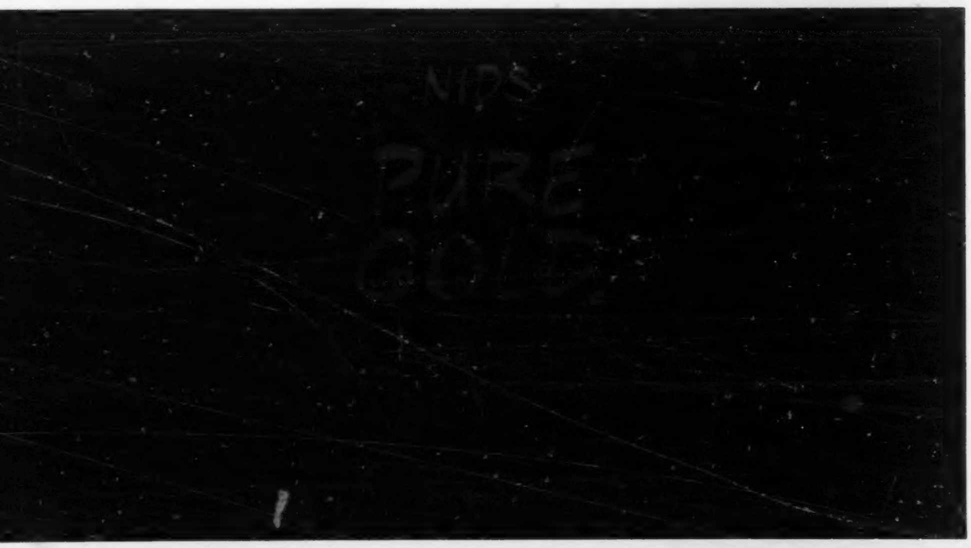

Continued from page 30

MTrust (Bond), Texas	−6.2
Bessemer Trust (E), N.Y.	−6.4
U.S. Trust, N.Y.	−6.7
Trust Co./West (Global), Calif.	−7.4
Citicorp (Eq.), N.Y.	−8.4
Marine Midland (Eq.), N.Y.	−9.1
Bankers Trust (Eq.), N.Y.	−9.1
Provident Capital (Low p/e),Pa.	−9.3
Union Bank (Eq.), Calif.	−9.7
Chase-CMB (EAFE index)	−10.4
Aetna Life (SA 134), Conn.	−12.5
Morgan Guaranty (Eq.), N.Y.	−12.7
Wellington Trust (Pacific Basin)	−14.0
MSCI World	**−14.2**
FTA World	**−14.3**
Chase-CMB (Eq.)	−15.5
MTrust (Eq.), Texas	−15.8
Bankers Trust (EAFE index)	−19.0
Prudential (Equity index), N.J.	−19.4
American Nat'l Chicago (Eq.)	−19.7
State Street Bank (Index)	−19.7
MSCI EAFE	**−19.7**
FTA Europe & Pacific	**−19.9**
Travelers Cos. (TIIF), Conn.	−20.1
Wells Fargo (Eq. index), Calif.	−20.1

1-year returns

	%
CIGNA (Eq.), Conn.	30.5
CL Capital (Stock), Ga.	22.9
Wellington Trust (Emerg. stock)	22.7
NCNB Nat'l (Stock), N.C.	20.9
IDS Int'l (Eq.), Minn.	19.1
Travelers Cos. (SA W), Conn.	18.4
Putnam (Eq.), Mass.	18.2
Bessemer Trust (E), N.Y.	15.5
The Principal (Stock), Iowa	15.1
U.S. Trust, N.Y.	14.9
Wilmington Trust (Eq.), Del.	14.5
Trust Co./West (Global)	13.9
Fidelity Mgmt. (Overseas eq.)	13.5
Wellington Trust (Stock), Mass.	13.2
Provident Capital (Low p/e), Pa.	11.7
PCM Int'l (Global yield), N.J.	11.5
Bankers Trust (Eq.), N.Y.	11.5
Assoc. Bank Neenah (World)	11.2
PCM Int'l (Print 2 eq.), N.J.	10.6
Citicorp (Fixed), N.Y.	9.9
PCM Int'l (Global bond), N.J.	9.1
IAA Trust (CTF-I), Ill.	8.2
Marine Midland (Eq.), N.Y.	4.4
Aetna Life (SA 134), Conn.	4.4
Union Bank (Eq.), Calif.	3.7
Morgan Guaranty (Bond), N.Y.	3.1
Morgan Guaranty (Eq.), N.Y.	2.9
Citicorp (Eq.), N.Y.	2.8
MTrust (Bond), Texas	−0.6
Chase-CMB (EAFE index)	−1.4
FTA World	**−1.6**
MSCI World	**−1.8**
Chase-CMB (Fixed)	−3.0
MTrust (Eq.), Texas	−4.0
Chase-CMB (Eq.)	−4.4
Wellington Trust (Pacific Basin)	−7.6
Bankers Trust (EAFE index)	−10.1
Prudential (Index), N.J.	−10.7
American Nat'l Chicago (Eq.)	−11.1
FTA Europe & Pacific	**−11.1**
State Street Bank (Index)	−11.2
Travelers Cos. (TIIF), Conn.	−11.3
MSCI EAFE	**−11.4**
Wells Fargo (Index), Calif.	−11.7

5-year returns

	%
CIGNA (Eq.), Conn.	33.1
Fidelity Mgmt. (Overseas eq.)	33.0
Bessemer Trust (E), N.Y.	31.9
Chase-CMB (EAFE index)	31.6
Bankers Trust (Eq.), N.Y.	30.9
NCNB Nat'l (Stock), N.C	28.6
American Nat'l Chicago (Eq.)	28.3
FTA Europe & Pacific	**28.3**
MSCI EAFE	**28.3**
Putnam (Eq.), Mass.	28.0
IDS Int'l (Eq.), Minn.	27.9
State Stree Bank (Index)	27.9
Wells Fargo (Index), Calif.	27.6
U.S. Trust, N.Y.	27.3
Citicorp (Eq.), N.Y.	27.2
Marine Midland (Eq.), N.Y.	27.0
Wellington Trust (Stock)	26.9
Aetna Life (SA 134), Conn.	26.7
Chase-CMB (Eq.)	26.7
Wellington Trust (Pacific Basin)	25.8
Union Bank (Eq.), Calif.	25.5
Travelers Cos. (SA W), Conn.	24.9
Morgan Guaranty (Eq.), N.Y.	24.4
PCM Int'l (Global bond), N.J.	24.1
FTA World	**22.1**
MSCI World	**21.9**
Chase-CMB (Fixed), N.Y.	19.3
Citicorp (Fixed), N.Y.	19.1
Morgan Guaranty (Bond), N.Y.	18.1

10-year returns

	%
Bankers Trust (Eq.), N.Y.	22.6
Putnam (Eq.), Mass.	21.5
U.S. Trust, N.Y.	21.1
MSCI EAFE	**20.9**
American Nat'l Chicago (Eq.)	20.3
Citicorp (Eq.), N.Y.	19.0
MSCI World	**18.7**
Morgan Guaranty (Bond), N.Y.	18.3

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Few CFOs cracking the million-dollar mark

3y Marcia Parker ınd Marlene Givant Star

Gary Wilson, the former chief inancial officer of The Walt Dis-ey Co., earned $2.5 million in 989, making him the highest aid top financial executive of nore than 1,000 public companies ampled by *Pensions & Investents*.

Mr. Wilson, the financial wizrd who since has left Disney to ecome a part-owner of Northvest Airlines, earned $500,000 in alary, a fifth of his total earnngs. The $2.5 million total inludes $500,000 of deferred cash ompensation and a $1.5 million ash bonus.

Multimillion-dollar chief finanial officers are unusual. Two of hem — Mr. Wilson and Rufus umfry, a founder of McCaw Celular Communications Inc. — upplemented their "paltry" saaries with dizzying extras mounting to $47,488,000 and 14,472,000 respectively. Both Mr. Vilson and Mr. Lumfry, whose alary amounted to $271,519, eaped the mind-boggling revards by exercising stock opions.

Only a few chief financial offiers had salaries alone that put hem over the million-dollar mark n 1989. They include F.C. Blodgett of General Mills Inc., who arned $1,069,402; M. Cabell Woodward of ITT Corp., who made $1,040,816; and Douglas McCorkindale of Gannett Co. Inc., who earned $1,020,000.

W. Bruce Thomas of USX Corp. and Ronald Arnault of Atlantic Richfield Co. were runners-up, earning $968,000 and $954,400 respectively. In 1988, Mr. Thomas earned $897,895 and Mr. Arnault, $843,222. Mr. Woodward was one of two executives who cracked the million-dollar salary level in '88.

The compensation paid to more than 150 chief financial officers and chief executives of the country's leading industrial and financial service companies is highlighted in the accompanying table. Data for the survey came from the companies' 1990 proxy statements.

Salaries include base pay and annual bonus but exclude other long-term compensation. Whenever the long-term incentive pay was provided alongside salaries in the proxies, it was listed separately under "other" in the table. Not all companies broke it down there, however, and not all chief financial officers are among the top five executives whose compensation is reported in proxies.

This year's survey represents the first time a chief financial officer tracked by *P&I* earned more than $2 million. In 1988's survey, only two chief financial officers

See **Salaries** *on page 37*

Used by permission, Gannett Co. Inc.

Although CFOs are gaining in corporate stature, compensation among them as a group is disparate. John Pope of UAL, left, earned $362,000 in salary in 1989; Maria Monet of Ogden Corp. earned $375,000. Two who broke the million-dollar mark were Douglas McCorkindale of Gannett, who earned $1.02 million, and M. Cabell Woodward Jr. of ITT, who earned $1.04 million.

Where they stand on the pay scale

Company	Top financial officer / salary / other compensation	Chief executive / salary / other compensation
	Aerospace	
Boeing	H.W. Haynes / $641,782	Frank Shrontz / $910,250
United Technologies	John Rolls / $375,000 / $245,000	Robert Daniels / $730,000 / $550,000
	Airlines	
AMR	Donald Carty / $322,917	Robert Crandall / $566,666
UAL	John Pope / $362,500 / $280,000	Stephen Wolf / $575,000 / $575,000
	Automotive	
Chrysler	R.S. Miller / $502,995	Lee Iacocca / $889,151
Cummins Engine	Peter Hamilton / $255,844	Henry Schact / $528,254
	Building	
USG	Eugene Miller / $266,667	Robert Day / $587,500 / $167,880
PPG Industries	Raymond LeBoeuf / $210,833 / $120,800	Vincent Sarni / $575,000 / $520,000
Sherwin-Williams	T.R. Mildich / $348,717	J.G. Breen / $862,643
	Chemicals	
Arco Chemical	William Magee / $744,106	Harold Sorgenti / $789,380
Dow Chemical	Enrique Falla / $445,655	Frank Popoff / $962,747
Church & Dwight	Anthony Deasey / $163,942 / $126,044	Dwight Minton / $365,777 / $305,530
Englehard	R. Keith Elliott / $565,578	Orin Smith / $967,431
Hercules	Arden Engebretsen / $355,500	David Hollingsworth / $544,245
Lubrizol	W.T. Beargie / $292,450	L.E. Coleman / $622,206
Olin	C.R. Tully / $350,004	J.W. Johnstone / $894,153
	Communications	
Centel	Eugene Irminger / $302,875	John Frazer / $672,500
Contel	Malcolm Holmes / $284,442 / $224,980	Charles Wohlstetter / $690,846 / $642,000
GTE	Nicholas Trivisonno / $565,054	James Johnson / $1,410,503
McCaw Cellular	Rufus Lumfry / $271,519	Craig McCaw / $288,756
MCI Communications	Daniel Akerson / $446,276	William McCowan / $1,325,000
NYNEX	Robert Eckenrode / $330,700 / $173,000	Delbert Staley / $511,500 / $650,000
Pacific Telesis	J.E. Hulse / $379,167 / $227,900	S. Ginn / $527,708 / $392,200
SNET	Daniel Miglio / $255,208	Walter Monteith / $527,980
Southwestern Bell	Robert Pope / $483,600 / $397,500	Zane Barnes / $929,200 / $661,500
United Telecommunications	Arthur Krause / $356,429	William Esrey / $1,129,842
U S WEST	Howard Doerr / $350,000 / $129,500	Jack MacAllister / $800,000 / $510,000
	Computers	
Cray Research	John Carlson / $285,207	John Rollwagen / $420,291
IBM	F.A. Metz / $677,775	J.F. Akers / $1,420,713
	Consumer products	
Borden	Lawrence Doza / $507,000	R.J. Ventres / $1,480,500
Colgate-Palmolive	Robert Agate / $375,758	Reuben Mark / $1,406,550
General Mills	F.C. Blodgett / $1,069,402	H.B. Atwater / $1,431,382
International Flavors	John Winandy / $258,432 / $125,000	Eugene Grisanti / $440,000 / $220,000
Reebok	Paul Duncan / $298,558 / $300,000	Paul Fireman / $357,200 / $14,249,000
Stride Rite	John Phelan / $195,000 / $273,852	Arnold Hiatt / $400,000 / $764,308
Whirlpool	James Samartini / $428,280	David R. Whitwam / $1,030,000
	Containers/packaging	
Stone Container	Arnold Brookstone / $553,839	Roger Stone / $1,378,706
	Cosmetics/personal care	
Avon Products	Edward Robinson / $436,974	James Preston / $843,932
	Defense	
Grumman	Robert Freese / $280,000 / $186,680	John O'Brien / $564,375 / $308,518
Lockheed	V.N. Marafino / $663,346	D.M. Tellep / $763,943
Litton Industries	Joseph Casey / $713,156	Orion Hoch / $1,110,089
McDonnell Douglas	J.G. Brown / $377,882	J.F. McDonnell / $834,436
Northrop	John Campbell / $261,218	Thomas Jones / $795,721
Textron	Dennis Little / $818,740	B.F. Dolan / $2,316,875
	Electrical equipment/electronics	
AMP	Benjamin Savidge / $298,214	Harold McInnes / $470,481
Cooper Industries	Dewain Cross / $419,864	Robert Cizik / $1,256,741
Honeywell	Christopher Steffen / $486,737	James Renier / $1,386,165
General Signal	Stephen Nagy / $240,00 / $115,200	Edmund Carpenter / $692,400 / $453,000
	Entertainment	
MGM Grand	Joseph Murphy / $168,310	Fred Benninger / $410,000
Walt Disney	Gary Wilson / $500,000 / $2,000,000	Michael Eisner / $750,000 / $8,839,360
	Financial services	
American Int'l Group	Edward Matthews / $440,000	M.R. Greenberg / $1,570,000
BankAmerica	F.N. Newman / $845,833	A.W. Clausen / $1,737,500
Bank of New York	Deno Papageorge / $530,704 / $88,595	J. Carter Bacot / $1,165,387
Berkshire Hathaway	J. Verne McKenzie / $235,000	Warren Buffett / $100,000
CIGNA	James Stewart / $705,000	Wilson Taylor / $1,103,000
Continental Bank	Hollis Rademacher / $381,500 / $350,000	Thomas Theobald / $2,686,671 / $2,415,000
Crestar Financial	Patrick Giblin / $348,000	Richard Tilghman / $808,000
Fleet/Norstar	John Flynn / $681,000	Terrence Murray / $1,327,000
General Re Insurance	Ronald Anderson / $348,840	Ronald Ferguson / $1,301,187
Kemper	Walter White / $182,888	Joseph Luecke / $830,000

Financial services continued on page 38

A place in the sun

Financial officers move up on peer scale

3y Leonard J. Hollie

The chief financial officer coninues to grow in importance and s now paid on par with top mangement operating and line posiions in many companies, accordng to a new compensation study.

"We have found over the past our to five years that this job has aken on more importance and hat is reflected in its pay," said Michael Halloran, vice president, TPF&C, Valhalla, N.Y., who vrote the study. "It is the only executive salary that has been keepng pace with the escalating saaries of chief executive officers."

Executive recruiters said their earches for chief financial officers or various companies show corporations are seeking people with oth management experience and a inancial background as well as vith international experience.

"The one issue is finding a CFO vith line management experience, uch as president of a subsidiary or a division manager. That is a ard combination to find," said Gordon Grand, managing director of Russell Reynolds Associates nc., New York, an executive reruiting firm.

The TPF&C report surveyed 325 ompanies. Industrial/service ompanies in the survey had melian revenue of $4 billion and financial organizations had median ssets of $30 billion.

In 1989, chief financial officers ad a median annual compensaon (base salary plus bonus) of 477,000, with a high of $2.5 milion and a low of $96,000, Mr. Halloran said.

"There is less emphasis on fixed ompensation and more on variable forms of compensation, such as incentive bonuses and stock option plans," said Thomas S. Tilghman, director of compensation for the executive recruiting firm of Arthur Young & Associates, New York.

The TPF&C study found the median gain in 1989 from stock option exercises for chief financial officers was $244,000, with a high of $47.5 million.

Growth in total direct compensation advanced to 10.3% in 1989 from 7.7% in 1988, with the increase due to higher stock options gains, the report stated.

The total median direct compensation for CFOs in 1989, including base salary, bonus and long-term incentives, was $473,000, with a high of $50 million and a low of $96,000.

Growth in total annual compensation, however, slowed to 7.8% in 1989 from 9.8% in 1988, the report said.

Executive recruiters agree the chief financial officer's job continues to increase in importance.

"There has been a marked increase in the number of positions in a company that report directly to the CFO, such as controllers, treasurers, assistant treasurers, and vice president of internal auditing," said Vincent Brennan, vice president, Korn Ferry International, New York, an executive recruitment firm.

"CFOs are getting better trained people who can be creative and who have more ability to do some of the many tasks that are being vacated by the CFO as he takes on more responsibility in the corporation," he said.

The study found more financial officers are on their company's board of directors, 35% in 1989 vs. 30% five years earlier. ■

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Financial services *continued from page 35*

Norwest	John T. Thornton / $216,000 / $127,302	Lloyd Johnson / $649,583 / $641,697
NWNL	John Fittle / $221,336 / $74,647	John Pearson / $424,191 / $189,281
T. Rowe Price	George Roche / $230,000 / $500,000	George Collins / $265,000 / $500,000
Primerica	James Dimon / $660,000	Sanford I. Weill / $1,536,318
State Street	David Spina / $472,815	William Edgerly / $828,816
Travelers	Thomas Thorsen / $664,808	Edward Budd / $950,000
	Food/beverage	
Hershey Foods	M.F. Pasquale / $200,000 / $90,902	R.A. Zimmerman / $500,000 / $305,209
Kellogg	C.W. Elliott / $372,000	W.E. LaMothe / $1,070,000
PepsiCo	Robert Dettmer / $587,582	D. Wayne Calloway / $1,505,096
Tootsie Roll Industries	Frederick Kushnir / $181,048	Melvin Gordon / $582,520
	Health/health services	
Abbott Labs	D.L. Burnham / $850,472	R.A. Schoellhorn / $1,608,300
Baxter Int'l	Robert Lambrix / $493,671	Vernon Loucks / $1,460,515
Bausch & Lomb	Stephen Kelbey / $366,915	Daniel Gill / $1,273,491
Pfizer	Jean-Paul Valles / $559,000	Edmund Pratt / $1,435,200
Warner-Lambert	Robert Dircks / $538,417	Joseph Williams / $1,505,000
	Lodging	
Hilton Hotels	Maurice Scanlon / $392,995	Barron Hilton / $967,274
	Lumber	
Georgia-Pacific	James Van Meter / $575,000 / $26,673	T. Marshall Hahn / $1,700,000 / $69,666
Louisiana-Pacific	John Hart / $275,000	Harry Merlo / $575,000
Weyerhaeuser	Robert Schuyler / $450,000	George Weyerhaeuser / $1,060,000
	Manufacturing	
Hartmarx	Jerome Dorf / $261,000	Harvey Weinberg / $536,000
Ingersoll-Rand	C.H. Folley / $818,350	T.H. Black / $1,103,183
Sundstrand	Paul Donovan / $230,000	Harry Stonecipher / $550,000
Stanley Works	R.A. Hunter / $340,320	R.H. Ayers / $792,731
	Metals/mining	
Armco	W.B. Askins / $460,417	R.E. Boni / $614,010
Asarco	Francis McCallister / $247,749 / $166,000	R. Osborne / $533,333 / $525,000
AMAX	Stephen Knup / $256,167 / $160,000	Allen Born / $685,000 / $500,000
Phelps Dodge	Patrick J. Ryan / $246,800 / $185,000	Douglas Yearley / $411,236 / $425,000
Pittston	D.L. Marshall / $460,000	P.W. Douglas / $675,000
	Multi-industry	
ITT	M. Cabell Woodward Jr. / $1,040,816	Rand Araskog / $2,387,562
Tenneco	Robert T. Blakely / $521,382 / $36,210 (def.)	J.L. Ketelsen / $1,436,473 / $199,663
TRW	S.E. Frank / $445,000	J.T. Gorman / $1,060,000
Chris-Craft	Laurence Kashdin / $170,000 / $580,000	Herbert J. Siegel / $750,933 / $12,936,290
	Oil/gas	
ARCO	Ronald Arnault / $954,417	Lodwrick Cook / $1,930,346
Baker Hughes	Max Lukens / $249,529 / $140,470	James Woods / $602,926 / $504,882
Coastal	David Arledge / $512,088	O.S. Wyatt / $1,252,000
Columbia Gas	Robert Oswald / $253,767 / $87,400	John Croom / $545,000 / $190,800
Consolidated Natural Gas	Lester Johnson / $248,700	George Davidson / $520,000
Enron	Jack Tompkins / $406,135	Kenneth Lay / $1,365,443
Ensearch	S.R. Singer / $343,583	W.C. McCord / $744,000
Kerr-McGee	John Linehan / $320,535	F.A. McPherson / $777,117
Louisiana Land & Explor.	Richard Bachmann / $401,539	H. Leighton Steward / $683,789
Panhandle Eastern	C.E. Lasseter / $258,068	R.D. Hunsucker / $858,285
Schlumberger	A. Lindenauer / $510,000	D.E. Baird / $1,140,000
Texaco	Allen Krowe / $810,360	Alfred DeCrane / $1,464,857
Unocal	Claude S. Brinegar / $852,107	Richard J. Stegemeier / $1,064,789
	Paper	
Bowater	R.D. McDonough / $351,999	A.P. Gammie / $480,000 / $203,040
	Publishing/broadcasting	
Capital Cities/ABC	Ronald Doerfler / $743,000 / $105,032	Thomas Murphy / $958,000 / $131,132
Gannett	Doug McCorkindale / $1,020,000	John Curley / $1,281,250
Knight-Ridder	Robert Singleton / $367,461	James Batten / $677,992
McClatchy Newspapers	James Smith / $179,540 / $37,928	Erwin Potts / $356,255 / $65,000
McGraw-Hill	Robert Bahash / $345,138 / $64,583	Joseph Dionne / $971,210 / $288,061
	Retail	
J.C. Penney	R.E. Northam / $430,862 / $115,819	W.R. Howell / $1,089,416 / $322,007
Melville	Robert Huth / $619,300	Stanley Goldstein / $1,189,300
VF	G.G. Johnson / $410,000	L.R. Pugh / $1,065,000
	Rubber/plastics	
Goodyear	Oren Shaffer / $330,000 / $100,964	Tom Barrett / $750,00 / $204,814
	Services	
Ashton-Tate	George Farinsky / $289,687	Edward Esber / $484,956
Control Data	John Buckner / $287,008	Lawrence Perlman / $657,790
Ecolab	Michael Shannon / $335,000	Pierson Grieve / $487,500
Ogden	Maria Monet / $375,000 / $358,617	Ralph Ablon / $2,000,000 / $284,240
Pitney Bowes	Carmine Adimando / $376,946	George Harvey / $882,688
	Steel	
Bethlehem Steel	Gary Millenbruch / $280,000	Walter Williams / $540,000
USX	W. Bruce Thomas / $583,001 / $385,000	Charles Corry / $696,599 / $650,000
	Tobacco	
American Brands	Arnold Henson / $586,050 / $166,050	William Alley / $1,171,159 / $371,159
	Tools	
Timken	J. Kevin Ramsey / $318,764	Joseph Toot / $595,865
Snap-on Tools	Lowell Larson / $235,527	Marion Gregory / $548,123
	Transportation	
Burlington Northern	P.Jackson Bell / $218,750 / $250,000	Gerald Grinstein / $870,000 / $780,100
Consolidated Freightways	Norman Banks / $253,232	Lary Scott / $468,232
Consolidated Rail	H. William Brown / $205,538	James Hagen / $305,044
GATX	John Chlebowski / $191,958 / $95,728	James Glasser / $496,629 / $320,152
Eaton	S.R. Hardis / $661,059	J.R. Stover / $1,149,715
Ryder Systems	Edwin Huston / $403,458	M. Anthony Burns / $743,583
Norfolk Southern	John Turbyfill/ $403,458 / $270,000	Arnold McKinnon / $741,766 / $487,500
Santa Fe Pacific	Orval Adam / $310,000 / $248,000	Robert Krebs / $800,000 / $313,880
	Utilities	
Commonwealth Energy	Russell D. Wright / $115,930 / $10,859	Gerald Anderson / $278,856 / $10,859
Consolidated Edison/N.Y.	Raymond McCann / $272,917 / $108,770	Arthur Hauspurg / $586,667 / $221,579
LILCO	George Sideris / $165,000 / $86,000	William Catacosinos / $365,000 / $298,000
Philadelphia Electric	Richard Gilmore / $294,979	Joseph Paquette / $821,651
SCE	John Bryson / $270,000 / $148,500	Howard Allen / $585,000 / $380,300
Sonat	J. Robert Doody / $470,000	Ronald Kuehn / $847,500
Transco Energy	Jim Wise / $396,583 / $34,783	George Slocum / $685,917 / $81,267
	Waste management	
Waste Management	Donald Flynn / $350,000 / $343,700	Dean Buntrock / $800,000 / $556,800

ROSA new kid on the block

Securitized European bank loans looking for U.S. investors

By Marcia Parker

LONDON — ROSA is here.

The acronym puts a pretty face on the jargon-afflicted name of new asset-backed securities backed by bank loans to U.S. corporations underwritten by Nomura International Ltd., London.

Nearly $800 million of the new restructured obligations backed by senior assets are being pitched to institutional investors mainly in Europe. Because the offering is being registered in the United States, American investors will have an opportunity to purchase the securities through the private placement market.

These Eurobonds are the first managed portfolio of bank loans. Assets are overseen by Nomura Securities International Inc., New York, which subcontracted the portfolio advisory role to Chancellor Capital Management, New York, which established a separate subsidiary, Senior Secured Management Inc. Chancellor Capital manages nearly $19 billion, largely for institutional investors.

An official at Chancellor Capital, said institutional investors are becoming more interested in investing in asset-backed securities. Although Chancellor Capital won't buy any of the securities for its own clients because it could pose a conflict of interests, he said his firm, like others, is talking with clients about investing in senior secured bank loans. "I think (bank-backed debt) will continue to be a growing part of the market," he said.

This is also the first publicly issued senior/subordinated security backed by bank loans to rely solely on excess cash flow and a reserve account to cover losses sustained by the ROSA portfolio. Ordinarily the package is are supported by surety bonds.

An executive at Nomura Securities said institutional investors on the Continent, Asia and the Mideast have purchased some of the securities. He said the buyers were attracted by the high yields and the fact that the assets are senior secured bank debt. "More traditional buyers are getting involved in buying bank loans directly, such as insurance companies and pension funds." He said other institutional investors that do not have the resources to prepare in-house analysis and handle monitoring are attracted to securitized loan packages.

Bank loans of all kinds increasingly are being securitized — from leveraged buy-out loans to home equity loans — and packaged for sale by investment and commercial banks scouting for as yet untapped assets. So far, only about a few transactions have been done involving corporate debt.

Financial institutions look more to funding assets off their balance sheets. By securitizing these assets, banks get the loans off their books and make some money in the process while investment bankers earn underwriting fees at a time when their traditional bread-and-butter business, corporate debt and equity offerings, has slowed.

To date, more than $70 billion of asset-backed securities have been offered, backed by credit card receivables and loans for automobiles, trucks, boats, mobile homes, equipment leases and other types of assets. Asset-backed securities are growing in popularity among institutional investors.

ROSA, which is also the name of the issuer of the Eurobonds, is a $1 billion Netherlands-based firm created by Nomura. ROSA will issue three classes of floating-rate notes: $300,000 senior notes, $500,000 senior subordinated notes and $200,000 income notes. The proceeds will be used to buy a portfolio of 30 to 50 commercial and industrial senior-term bank loans to U.S. companies originated by various banks. The average size of the loans will be $20 million to $25 million, with a range from $10 million to $40 million. The portfolio concentrations in a single company will be limited to 4% and in a single industry to 8%. ROSA can invest up to 100% of its portfolio in loan participations. There are limits on how many loans come from any given bank.

Moody's Investors Service, New York, is satisfied ROSA's structure can withstand defaults of up to 43% of its collateral.

The senior Eurobonds are overcollateralized by $500 million in senior subordinated notes, $200 million in equity notes, a 75 basis point reserve fund and recoveries from defaulted bank loans. Repayment on the senior subordinated Eurobonds is supported by the cash flows from the equity tranche and bank loan recoveries and by the interest reserve account, according to Moody's.

Moody's rated the senior Eurobonds Aaa and the senior subordinated bonds A3; the income notes were not rated. It is the first Aaa class in a senior/subordinated collateralized loan obligation, according to the rating agency.

Principal will be reinvested in new loans during the first seven years of ROSA if certain trading tests are met, although Nomura doesn't anticipate active portfolio trading. The notes are paid interest only during the reinvestment period. That will end no later than March 10, 1997, when amortization of the notes starts. ROSA intends to retire the notes by March 10, 1998.

Payment of interest and principal on ROSA's Eurobonds is not subject to Dutch or U.S. withholding taxes because of tax treaties between the two countries. ■

Divested portfolios miss mark

A majority of South Africa-free portfolios underperformed market indexes and unrestricted portfolios in the fourth quarter.

The median equity-plus-cash portfolio in Brian Rom Corp.'s South Africa-free universe was down 1.1% in the last quarter of 1989; the median equity-only portfolio was up 0.1%.

The Standard & Poor's 500 Stock Index was up 2.1% and a South Africa-free version of the index gained 1.4%. Among unrestricted portfolios in the Wilshire Cooperative Universe, the median equity-plus-cash return was 1.1% and the median equity-only return was 1%.

The numbers indicate that over longer time periods, underperformance may be associated with divestiture of South Africa-related securities, because divestiture decreases the universe of stocks eligible for investment, said Brian Rom, president of the consulting firm.

But investors seeking South Africa-free managers would do well to look how those managers' South Africa-free portfolios compare to their unrestricted portfolios and to see if the managers' performance is attributable to something else in their investment process besides divestiture, he said.

The top South Africa-free equity-plus-cash manager for the quarter was Nicholas-Applegate Capital Management, San Diego, with 2.6%. Oppenheimer Capital Corp., New York, was second with 2.3%.

Thompson, Siegel & Walmsley Inc., Richmond, Va., managed the top equity-only portfolio at 3.8%; First Asset Management, Minneapolis, was second with 3.2%.

For the full year 1989, the median South Africa-free equity-plus-cash portfolio returned 24.7% and the median equity-only portfolio had 25.5%. The S&P 500 returned 31.5%, the South Africa-free version of the index had 30.7%. The Wilshire Cooperative medians were 26% (equity plus cash) and 29.7% (equity only).

Provident Investment Counsel, Pasadena, Calif., had the top South Africa-free equity-plus-cash portfolio for the year, returning 45.5%, and Columbus Circle Investors, Stamford, Conn., was second with 39.7%.

Harbor Capital Management, Boston, had the top equity-only portfolio, returning 34%, and First Asset Management was second with 32.5%.

For the five years ended Dec. 31, the median South Africa-free equity-plus-cash portfolio returned 19.1% on a compound annual basis. The S&P 500 returned 20.4% and the South Africa-free index, 18.9%. The median unrestricted portfolio had 18.6%.

The median equity-only South Africa-free portfolio returned 19.4% and the median unrestricted one, 20.2%.

The top South Africa-free manager on an equity-plus-cash basis was Ariel Capital Management Inc., Chicago, 28.6%.

The top equity-only portfolio was run by United States Trust Co. of Boston, with a 20.4% return.

Brian Rom Corp.'s South Africa-free universe is made up of 49 equity-plus-cash managers with $9.4 billion in assets and 22 equity-only managers with $2.2 billion. ■

Salaries

Continued from page 35

earned $1 million or more.

The group of top-earning chief financial officers spans a variety of industries and, in some cases, chief financial officers earned close to what their company's chief executive earned.

William Magee, chief financial officer of Arco Chemical Co., earned $774,106 while Harold Sorgenti, the chief executive, earned $789,380. V.N. Marafino, CFO of Lockheed Corp., earned $663,348, while chief executive D.M. Teller earned $763,943. General Mills' Mr. Blodgett, with $1,069,402 in compensation, came close to CEO H.B. Atwater's $1,431,382.

In the case of Berkshire Hathaway Inc., chief financial officer J. Verne McKenzie earned $235,000 — double the salary of chief executive Warren Buffett.

In addition to the top breadwinners, other highly paid financial executives include Robert Pope of Southwestern Bell Corp. with $881,100; D.L. Burnham of Abbott Laboratories, $850,472; Ronald Doerfler of Capital Cities/ABC Inc., $848,032; F.N. Newman of BankAmerica Corp., $845,833; Dennis Little of Textron Inc., $818,740; C.H. Folley of Ingersoll-Rand Co., $818,350; and Alan Krowe of Texaco Inc. with $810,360.

In certain industries, some chief financial officers earned much more than their counterparts at competitor firms surveyed by *P&I*. In the banking industry, BankAmerica's Mr. Newman, with $845,833, earned more than any of his counterparts. Coming in No. 2 was Deno Papageorge of Bank of New York, with $530,704. Arco Chemical's Mr. Magee, at $774,106, earned the most of his chemicals industry competitors; R. Keith Elliott of Englehard Corp. was second with $565,578. In the defense industry, Textron Inc.'s Mr. Little earned $818,740 while Litton Industries Inc.'s Joseph Casey earned $713,156.

Bonuses represented the lion's share of the earnings of many chief executive officers. The highest paid top executive among the group was Michael Eisner of Disney with $16.3 million. Mr. Eisner's salary was $750,000. His $8,839,360 cash bonus was more than 10 times his salary. Herbert Siegel of Chris-Craft Industries Inc. followed with $13.7 million, of which only $700,000 was salary. Paul Fireman of Reebok International Ltd.'s $14.2 million bonus eclipsed his $357,200 base salary. Mr. Fireman's bonus no doubt was pumped up by profits on Reebok's button-operated "pump" basketball shoes, which were paid tribute on the cover of the company's annual report.

Other highly paid chief executives include Thomas Theobold of Continental Bank who earned $5.1 million. Two other CEOs logged salaries of more than $2 million: B.F. Dolan of Textron and Ralph Ablon of Ogden Corp., each with $2.3 million. ■

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PBGC data causing sparks

List of unfunded liabilities not accurate, experts argue

By Hillary Durgin

WASHINGTON — The PBGC's list of companies with the 50 largest unfunded pension liabilities has unleashed a publicity storm over when and how companies will fund the benefit obligations, totaling $13.5 billion.

The data — dominated by old-line industrial companies, particularly automotive, airline, steel and rubber - provide a measure of the potential exposure of the Pension Benefit Guaranty Corp.

Pension experts argued, however, the list contains outdated and incomplete information that must be interpreted with such a labyrinthine list of caveats its usefulness is questionable. In fact, because some of the media have focused on the size of the liabilities or funded ratios, and have overlooked the companies' financial strength and other factors, the list actually might do more harm than good, some experts said.

For example, General Motors Corp.'s unfunded liability is second on the list, at $1.9 billion at the end of 1988. But the company's underfunded plans, the only ones listed, had assets of $17.5 billion, making these plans less than 10% shy of being fully funded. Plus, the PBGC list didn't note that GM has other pension plans that were overfunded by $3.8 billion in 1988.

Some media have misrepresented GM's funded position as being negligent, said Terrence Sullivan, manager for sales and financial reporting at GM.

"I've read some wire services which were terribly misleading and which were, in fact, irresponsible," he said. "Being less than 10% underfunded is a very good position to be in."

In addition to taking into account a company's asset base and financial strength, there are a host of other factors that should be considered when assessing the PBGC's list, company spokesmen and actuaries said. In the case of companies with collective bargaining plans, for example, the liabilities might be a reflection of the way benefit plans are negotiated and have no bearing on a corporation's financial health.

Other factors that should be taken into account are the adjustments the PBGC has made to the liabilities based on its specific interest rate assumptions and how it defines guaranteed benefits.

In the case of the automotive companies, many of the pension plans are "flat-dollar" plans that base benefits on an employee's length of service rather than on a percentage of salary. Because companies like GM and Chrysler Corp. have a large number of retirees relative to active workers, improving benefits means a hike in liabilities stemming from past service obligations.

The PBGC listed Chrysler's unfunded liability at $2.6 billion, based on plan assets of $4.4 billion and guaranteed benefit obligations of $7 biilion at the end of 1988.

"Most of the unfunded liabilities have to do with past service liability," Alan Reuther, associate general counsel to the United Auto Workers, Washington, said of the auto plans.

The liabilities are inherent in the nature of the benefit plans, Mr. Reuther said, and while 100% funding would be better, it's not necessarily important as long as the a company meets its current funding obligations.

The PBGC's list was compiled by Compustat Services Inc. from annual report data for fiscal years ended June 1988 through May 1989. Since then, however, some companies have reduced their liabilities.

Bethlehem Steel Corp. has reduced its unfunded liability by $721 million in the past two years, to $879 million at the end of 1989 from $1.6 billion at the end of 1987, said Henry Von Spreckelsen, a Bethlehem spokesmen. The liability was reduced by making contributions in excess of what's required, he said, adding Bethlehem has contributed more than $1 billion during the past two years.

"We plan to continue to reduce our unfunded pension liability, and are hoping to have the plan fully funded in the next couple of years," Mr. Von Spreckelsen said.

The PBGC, in general, used a 7.75% interest rate to value annuities for terminating single employer plans; the actual rates used by companies varied from 8% to 10.5%, according to the PBGC. In addition, the PBGC reduced vested benefits reported by companies by 5% to reflect the fact that all vested benefits are not guaranteed by the PBGC.

As a result of the conservative interest rate assumption, liabilities were increased, in aggregate, by 13%, the PBGC said.

Lowering the interest rate assumption can have a dramatic impact on a company's liabilities.

With Bethlehem Steel, for example, the PBGC calculated the company's unfunded liability to be $1.4 billion in 1988, based on guaranteed benefit obligations of $4.2 billion and assets of $2.8 billion.

Bethlehem Steel, however, used an interest rate assumption of 9.5% — not the PBGC's 7.75% — and reported a $1.02 billion liability — nearly $400 million less than the PBGC figure. The company said it had obligations of $3.8 billion and assets of $2.8 billion.

The confusion the PBGC list has created over how to interpret the data has raised questions among as to why the PBGC released the list.

James B. Lockhart, executive director of the PBGC, said the list was released first to Consumers Digest in response to a request the magazine had filed under the Freedom of Information Act. The agency's primary reason for issuing the list, however, stemmed from its loss prevention strategy to encourage companies to better fund their plans, he said.

"It really is part of our enforcement strategy to encourage plans to better fund themselves and to get the information out there," Mr. Lockhart said.

Funding rules preventing an employer from making tax-deductible contributions once a plan's assets exceed 150% of current liability could, in fact, exacerbate the problem of underfunded pension plans, said Richard S. Raskin, consultant with The Wyatt Co., New York.

"I think the list will be larger five years from now," he said. ■

Companies with the largest underfunded pension liability

...by adjusted unfunded guaranteed liability*

Company	Liability ($ millions)	Funded ratio
Chrysler	2,628	62.4%
GM	1,910	90.1
Bethlehem Steel	1,380	67.1
Pan Am	602	33.0
Texas Air	555	70.4
Navistar	454	79.4
Westinghouse Electric	451	89.3
Uniroyal Goodrich	394	48.4
Trian Holdings	389	49.7
Armco	323	83.1

...by funded status

Company	Funded ratio	Liability ($ millions)
CF&I Steel	28.5%	152
Sharon Steel	31.2	170
Pan Am	33.0	602
LTV**	36.1	244
Loews	41.2	106
ASI Holding	44.3	194
Keystone	45.0	91
Jesup Group	47.1	64
United Brands	48.0	49
Uniroyal Goodrich	48.4	394

*Adjusted to PBGC interest rate at time of valuation

**Does not include three disputed LTV plans

Source: Pension Benefit Guaranty Corp., Washington

Tax-exempt investors targeted

BOSTON - Fidelity Investments has introduced the Fidelity U.S. Bond Portfolio, a mutual fund which tracks the Shearson Lehman Hutton Aggregate Bond Index.

The index is made up of about 6,000 issues, including government bonds, mortgage-backed securities and investment-grade corporate bonds.

The fixed-income fund was created for institutions, including pension funds, foundations, endowments and bank trust departments.

The minimum investment is $100,000. ■

Foreign

Continued from page 3

eschewed Japan — a strategy it has been employing for the past two years — and favored the Continent. For several years prior to 1988, "we had made a lot of money in Japan, then we took our profits and pursued basically a continental Europe strategy," explained Nicholas Carn, investment director of CIGNA International Investment Advisors.

Very recently, CIGNA returned to the Japanese stock market, and now has about 8% invested there. Mr. Carn stressed, however, the firm is "still heavily overweighted in Europe, and we particularly like Italy. We think Europe will continue to produce good investment returns with an exceptionally low level of risk."

Among CIGNA's European strategies has been to invest in "financial restructuring situations. In 1988, we correctly anticipated European mergers and acquisitions and set out to find specific investments where big, undervalued situations existed. We felt conditions were changing in a way that made it highly likely that those asset (values) would be realized for shareholders," Mr. Carn said.

stock picks have been the German companies **Hoesch Group** and **Mannesmann AG**, that gained both from Europe 1992 developments and a "stronger-than-expected West German economy," said Mr. Carn. Two beneficiaries of merger and acquisition-type activity have been the stocks of insurance companies **Colonia** in Germany, and **Groupe Victoire** in France.

For the year ended March 31, the top PIPER fund was CIGNA's international equity fund, up 30.48%. In comparison, the EAFE returned −11.35%, the MSCI World Index, −1.76% and the FT-A World Index, −1.55%.

Among PIPER+ funds, the International Discovery Fund of Rowe Price-Fleming International Inc., Baltimore, was up 34.27% and Scudder's global fund led again with 24.8%. The median PIPER+ international fund returned 11.81% and the global fund, 12.75%.

For longer periods, CIGNA's fund also was a top performer. With a compound annualized 33.08% gain, the fund ranked first among PIPER international funds for the five years ended March 31. For the 10 years, the InterCap Equity fund of American National Bank & Trust Co. of Chicago was up a compound annualized 20.31%, leading the PIPER universe. The EAFE returned an annualized 28.27% and 20.94% and the MSCI World returned 21.87% and 18.71%. The FT-A World Index returned 22.06% for the five years and had no return for the 10-year period.

Among PIPER+ international funds, the Castegren International fund of Marsh & Cunningham-Castegren International, Boston, topped competitors for the 10 years, reporting an annualized 29.54%. The fund came in second for the five years, at 38.5%.

For PIPER+ global funds, WorldInvest Ltd., London, was the winner for the five-year period with an annualized 34.24%.

The PIPER+ international and global median funds for the five years returned a compound annualized 28.3% and 21.78% respectively. For the 10 years, the funds returned an annualized 19.87% and 18.86% respectively.

Hakan Castegren, partner at Marsh & Cunningham-Castegren, cited an overall value orientation and a strategy of selecting stocks in industries he believed would be emerging from a slump as keys to the fund's success.

"A typical example was the shipping industry, which started out of a slump about two years ago," said Mr. Castegren. He bought such stocks as **Keppel Corp.** in Singapore or **Mitsui**

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Liquidation

Continued from page 2

dorsed by outside counsel, are in the best interests of the participants. We have been communicating directly with members of the fund to keep them apprised of our actions, and we will continue to do so," officials said in a statement responding to the charges.

Regarding the change in payout methods and any possible conflict of interests, the Travelers statement said the company "has worked hard to establish its reputation for integrity in this business. Our plan to change to a pro-rata payout method was proposed to ensure that all participants will be treated fairly and equitably when the account assets are distributed."

Mr. Lawson said plan sponsors representing 70% of the fund's assets have requested redemption of their interests in the fund.

"Faced with this torrent of liquidation and redemption requests, the Travelers notified participating retirement funds in January that it could neither manage the fund nor fulfill its fiduciary duties under the existing liquidation and redemption rules, and that it was proceeding with an amendment to the plan of operation which would call for the pro-rata satisfaction of liquidation and redemption requests, effective Feb. 26," he said.

Since the announcement, a number of retirement systems, including the Maine and Dallas funds, lodged complaints with the New York Department of Insurance, Mr. Lawson said. Complaints also have been filed with the Texas attorney general, the Texas Board of Insurance and Connecticut's insurance commissioner.

Separate Account R has been facing a drain on assets since 1986, and efforts to restructure the fund in 1987 apparently have not stemmed the tide of redemption requests.

The equity component of the fund was faced with about $200 million in pending withdrawals as of Dec. 31, 1986, the most recent data available, while the account's gross equity real estate assets were $374 million and a debt, or mortgage, component, had $83.9 million.

Mr. Lawson said there is concern among Separate Account R participants that have been waiting for redemptions over whether sufficient assets would remain in the fund to satisfy their claims under a pro-rata method. Their concern, he said, is based on the fund's history of poor performance and "history of losses which continue to be a problem."

One Travelers executive said it is true some Separate Account R investors have communicated with the company regarding "possible liquidity problems . . . but the conclusions being drawn (by Mr. Lawson) are erroneous."

Mr. Lawson said Travelers officials have refused to identify all the Separate Account R investors and have refused requests to meet with investors in the fund to discuss ways of resolving the dispute.

He said Separate Account R participants have attempted, unsuccessfully, to persuade Travelers to rescind the amendment and have Travelers and participants jointly select an independent fiduciary to liquidate the fund, or to call a meeting of all participating pension funds to work out a plan of resolution. He said participating pension funds also are seeking a rebate — rejected by the company — of Travelers fees for managing and supervising the fund.

Officials at Northeast Utilities and Dallas Police and Fire declined to discuss the matter.

Maine's Mr. Perrier said working with Travelers has been difficult; the fund has been waiting since 1986 to recover its $25 million investment.

"We are still waiting," he said. "It's difficult to get information from them; Travelers won't tell us who the other participants are," he added.

He said the fund did recover $7 million of its investment, representing the debt portion, leaving $18 million in real estate equity to be recovered.

Mr. Perrier said the portfolio has experienced "significant devaluation" over the years. He said he has serious questions about the changes in the payout methodology.

"We strongly objected because they didn't notify us ahead of time about the change," he said. "We had serious questions before the changes were made. We weren't notified; we weren't objecting to the changes themselves, although we haven't seen all the information as yet." ■

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Stock buyback

Continued from page 3

hind the doors of its Checkerboard Square headquarters. James R. Elsesser, its chief financial officer, declined to be interviewed for this story. A company spokesman said the buybacks are "a strategy proprietary to us that he doesn't care to go into detailing publicly."

In the 1989 annual report Mr. Stiritz said: "We continue to have a strong dedication to cash flow. The availability of excess cash is a key measure of management's effectiveness, and its deployment is a task which we place at the top of our agenda."

Ralston Purina started its buyback program in 1982, when the share price was $9 and the price earnings ratio was 7 to 8. The company has announced or completed 18 buybacks since 1982, and its stock price has increased nearly tenfold.

It has repurchased almost 62 million shares or 52% of the total, for a value of almost $3 billion. That ranks it first among food and beverage companies in its percentage of stock repurchased and second only to Coca-Cola Co. in dollar value of buybacks, according to the DLJ report.

Buybacks "definitely did create shareholder value and were additive to earnings without exception. For a big cash flow generator, buybacks are a very palatable use of corporate cash vs. risky acquisitions. The market has always felt comfortable with them," said Mr. Ramey of County NatWest.

The more the stock price rises (causing the company's price-earnings ratio to rise), the more expensive buybacks become. But assuming a 10.5% cost of capital, Ralston Purina can pay up to 15.8 times earnings before buybacks begin to have a dilutive effect on earnings, Mr. Ramey said. He gives Ralston Purina a neutral rating partly because "the lack of an operating story hurts the company."

The California Public Employees' Retirement System holds 430,000 shares of Ralston Purina, much of it through index funds. "If they buy back shares we'll sell to the extent that it will allow us to maintain a proportional weighting of the shares in the S&P 500," said Carl Wilberg, principal investment officer of the system.

Officials of the Teachers Insurance and Annuity Association — College Retirement Equities Fund, New York, which owns 604,182 shares of the company, declined to comment. In November, Ralston appointed John H. Biggs, president and chief operating officer of TIAA-CREF, a director of the company.

Analysts say Ralston Purina's three businesses are not particularly attractive now. Pet food is flat to declining; the company's Energizer and Eveready batteries face stiff competition from Duracell; and its bakery subsidiary has not been a great performer in a business that is growing slowly, Mr. Ramey said.

The company began its buyback programs about the same time Mr. Stiritz became its chairman and chief executive.

Mr. Stiritz "has restructured the company and focused on financial issues at Ralston more than operating issues. He's more of a restructuring-type manager than an operating-type manager," Mr. Ramey said.

The company will continue to generate a significant amount of free cash in the future, about $1.9 billion in excess of dividends and capital expenditures over the next five years, according to Dean Witter's Mr. Adelman.

"I think their strategy is appropriate for their company for the time being. It's better than throwing their money away on acquisitions that don't make sense. They've been rewarding the stockholder with good returns in a different kind of way," he said. He puts a 'hold' rating on the stock.

Mr. Adelman predicts earnings per share on a primary basis of $6.30 per share in September 1990 and $7.05 a year later. DLJ estimates EPS of $6.25 and $7.35 for those periods. ■

NPA

Continued from page 2

anticipated little problem finding work, according to Mr. Merrill.

National Life now will have to hire an outside firm to manage the portfolio, consisting of $140 million worth of real estate in the insurer's general account and $160 million with RCB Trust Co.'s commingled real estate fund. Pension fund clients include Unisys Corp., Eastman Kodak Co. and the Vermont State Retirement System.

Mr. Merrill said hiring whatever firm the NPA employees work for is an option National Life is exploring.

"We were quite satisfied with their management," Mr. Merrill said. "They will be selected if they are the best managers."

David A. White, vice president-capital management for the $5 billion Unisys fund, expressed satisfaction with NPA. He said Unisys, an investor in RCB's $35 million Real Property Trust closed-end fund, will follow the advice of Edgar A. Barksdale, president and chief executive officer of RCB.

Said Mr. Barksdale: "We are evaluating the alternatives. . . . We are sorry to be the victim of the downsizing of National Life."

According to Andrew McGregor, president of NPA and one of the executives who accepted the separation plan, all but two of the employees leaving NPA want to remain together as a unit. Mr. McGregor, naturally, believes the group should be hired to manage the separate account properties, at least.

"Someone has to be selected. We are a team of professionals that worked well together," Mr. McGregor said. ■

Short sellers

Continued from page 3

Frank Lane, chief investment officer. Market capitalizations are $500 million or less.

Mr. Lane said he looks for companies with low debt that have greater than a 15% return on equity and high management ownership.

Winners in the past year, he said, have been **Fastenal Co.** and restaurant stocks, including **Sizzler Restaurants International Inc., Cracker Barrel Old Country Store Inc. and Chili's Inc.**

SLH Trust Co. in Wilmington, Del., had the best performance for the five-year period ended March 31. Its Growth Fund 2 returned an annualized 28.88%. In comparison, the median return was 13.25%; the S&P, 17.53%; and the Russell 2000, 9.51%.

The fund is extremely volatile, with a turnover of 600% not unusual, according to Steven Kroll, president of SLH Asset Management Group, New York, which manages the $30 million fund for SLH Trust.

"Everything is earnings momentum," Mr. Kroll said. The firm holds about 60% of the portfolio in name stocks, such as **Bristol-Myers Co., Motorola Inc.** and **Boeing Co.** that it will hold and occasionally increase as earnings reports come in. The other 40% is traded aggressively.

For the long term, Provident Capital, Philadelphia, had the best performing commingled fund for the 10-year period with a 21.86% annualized return, while Cramer Rosenthal McGlynn, Inc., New York, was the best performing investment management firm in PIPER+, with a 23.56% annualized return.

For the 10 years, the median PIPER return was 16.27%; the median PIPER+, 14.27%; the S&P 500, 17.7%; and the Russell 2000, 15.83%.

Edwin Powell, vice president and senior portfolio manager for Provident Capital, said the $50 million account is a small-cap, value-oriented, low-risk fund. The average market capitalization is about $210 million, and the fund typically has 65 to 70 issues. The fund uses several value screens.

"Even in a major correction, small-cap stocks will be in line with the market at worse," Mr. Powell said. Of the six major recessions since 1957, in only one — 1969-1970, did small caps markedly underperform the market, he said.

Cramer Rosentahl McGlynn topped the PIPER+ list with a composite performance of 23.56% for nine special accounts totaling $65 million.

Four of the accounts were begun with the firm's inception in 1973; the other five were started in 1985 and 1986.

According to Jay Abramson, the firm's vice president and general counsel, all of the accounts tend to be aggressive in stock selection, looking for small- to medium-capitalization opportunities or private companies. They also invest in an in-house fallen angel fund.

The accounts have benefited from a history of investments in supermarket stocks, such as **Vons Co.** and **Penn Traffic Co.** ■

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THE LARGEST MONEY MANAGERS

Assets increase, but lag markets

Defined contribution plans, international equities are the bright spots

By Trudy Ring

Growth of discretionary tax-exempt assets run by money managers again didn't keep pace with indexes in 1989, indicating continued stagnation of the defined benefit plan market.

Discretionary tax-exempt assets handled by the entire universe of managers profiled by *Pensions & Investments* this year grew 15.5%, to $2.174 trillion from $1.882 trillion. In comparison, a benchmark portfolio would have increased 21.2%.

The asset mix for the entire manager universe was 48% stocks, 29% bonds, 12% cash, 6% real estate equity, 1% mortgages and 4% other investments. The benchmark portfolio was constructed by measuring returns equal to 48% of the Standard & Poor's 500 Stock Index, 30% of the Shearson Lehman Hutton Government/Corporate Bond Index, 16% of the 90-day Treasury bill return and 6% of the Russell-NCREIF Property Index.

Assets of defined benefit pension plans — the managers' primary market — have grown little in the past few years, as many plans are at or near full funding and are paying out more in benefits than they are receiving in contributions.

"It's a pretty flat marketplace," said David L. Eager, managing partner of Eager & Associates, Louisville, Ky., a consultant to money managers.

Defined contribution plans continued to grow. The amount managed for 401(k) and 457 plans increased 17.5%, to $146.4 billion from $124.6 billion. Considering these plans have the bulk of their assets in guaranteed contracts and short-term investments, that growth outpaced investment returns. GICs returned an average of 9% last year, Mr. Eager said. T-bills returned 8.9%.

Discretionary tax-exempt assets managed by the 500 largest managers in the universe grew 14.9%, to $2.104 trillion from $1.831 trillion; the amount run by the top 100 grew 13.8%, to $1.456 trillion from $1.279 trillion.

Total assets — including taxable and non-discretionary assets — handled by the entire manager universe came to $4.6 trillion. The top 500 had $4.1 trillion of this and the top 100, $2.6 trillion. A total of 1,153 managers participated in *P&I's* survey this year, up from 1,072 last year.

Money managers not affiliated with a bank or insurance company increased their share of the discretionary tax-exempt market slightly in 1989, to 38.8% from 38.1%. Insurance companies and their subsidiaries had a slight decrease, to 28.7% from 29.4%, and banks and their subsidiaries stayed constant at 32.5%.

Among the 500 largest managers of discretionary tax-exempt assets, independent managers' share increased to 38% from 37%; insurers' share decreased to 29% from 30%; and banks' share remained at 33%. Among the top 100, independents' share increased to 30% from 29%; insurers' portion decreased to 36% from 38%; and banks' portion increased to 34% from 33%.

Despite their slight gain in market share, independent money managers don't have the edge over banks and insurers that they appeared to have in the past few years, consultants said.

"In certain investment disciplines, the large institutions have become very competitive," said Ronald D. Peyton, president and chief executive officer of Callan Associates Inc., San Francisco. These disciplines include indexing, quantitative strategies, fixed income, real estate and international, he said.

In specialized areas, such as small-capitalization stocks, management boutiques seem to have the edge, but they don't have the marketing strength of larger firms, Mr. Peyton said.

Added Mr. Eager: "I see the organizations playing on a much more level plane than ever before."

International equities had the most dramatic growth of any asset class in 1989, soaring 44.5%, to $77.087 billion from $53.351 billion, far outstripping the growth that would have come from market appreciation alone. The Morgan Stanley Capital International Europe Australia Far East Index returned 10.8% in 1989.

Allocations to international bonds and cash were down slightly from the previous year.

"We're doing a lot of searches in the international area, and that's the big bucks from the big funds," Mr. Peyton said. Fund executives continue to see equities rather than fixed income as the way to go international, he said.

"I think there are a lot of people who've made long-term commitments to international and they're still funding them," Mr. Eager added.

Indexed stocks grew 43%, to $195.875 billion from $136.978 billion, also outstripping market appreciation — the S&P 500 was up 31.5% in 1989. As domestic equity indexing by U.S. tax-exempt funds appears to have peaked, the growth might be due to international equity indexing and to moves by a few large investors.

Bond index funds' growth was nearly all attributable to increased market valuation. Indexed bond assets grew 14.9%, to $47.656 billion from $41.478 billion. The Shearson Lehman Hutton bond index was up 14.2% in 1989.

Assets of dedicated and immunized bond funds decreased 9.8%, to $58.841 billion from $65.222 billion. Dedication and immunization were hot strategies a few years ago, as pension funds looked to lock in high interest rates to fund a known stream of liabilities.

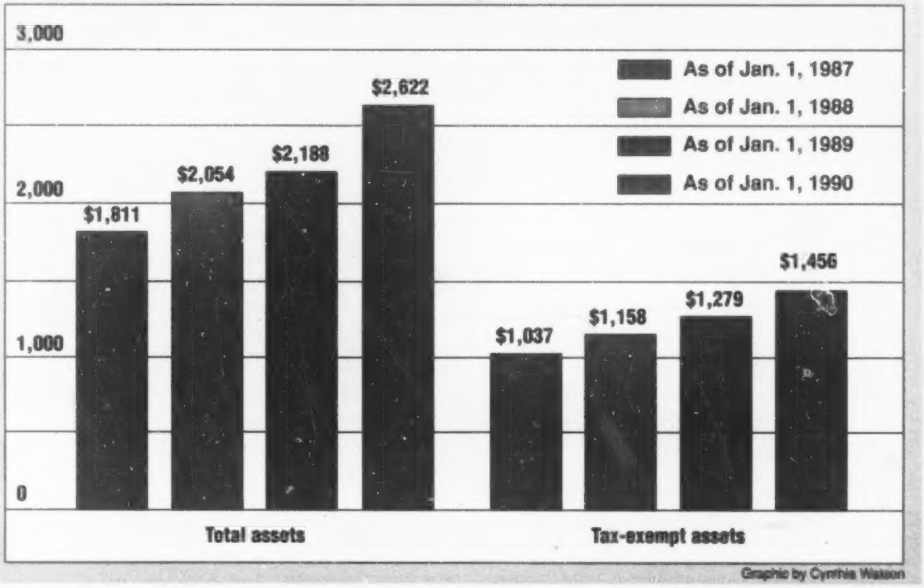
Now, dedicated and immunized portfolios are decreasing as they pay out benefits, and fewer pension funds are setting them up because interest rates have come down.

Despite the growth in 401(k) plans, assets invested in GICs grew just 4.5%, to $144.6 billion from $138.4 billion.

Assets invested in real estate equity grew 5.6%, to $102.6 billion from $97.1 billion. Although this is roughly equal to what growth would have been from investment return, Mr. Peyton said he believes pension funds are continuing to put money into real estate. Assets invested in mortgages grew 9.4% in 1989, to $98.7 billion from $90.2 billion. ■

Growth in assets of Top 100 managers

($ in billions)



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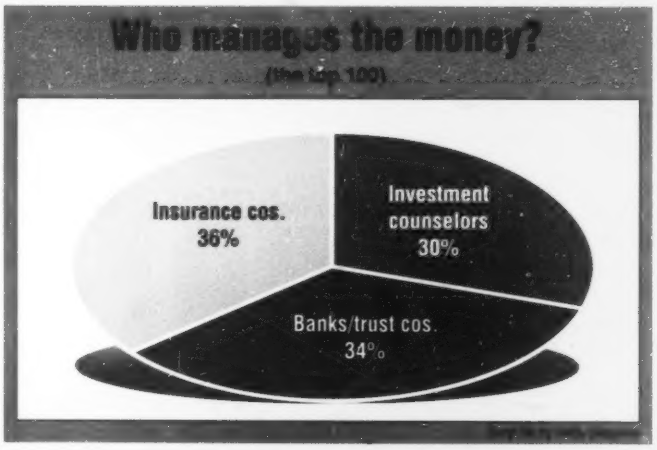
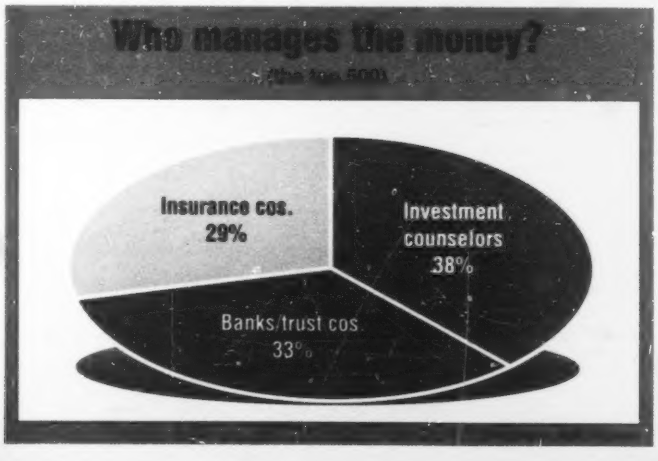
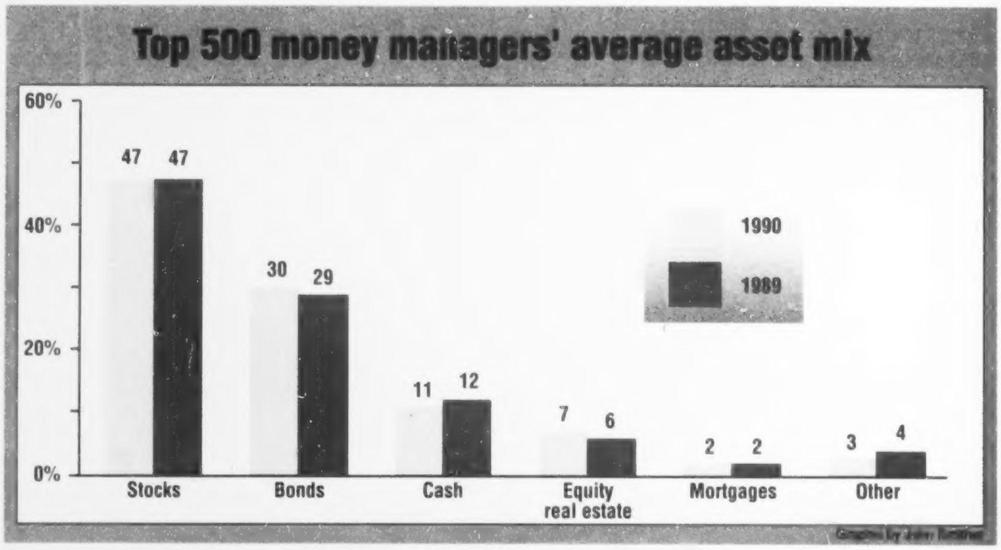
Profile statistics at a glance

Total managers profiled	**1,153**
Banks, trust cos. and subsidiaries	243
Insurance cos. and subsidiaries	117
Investment counselors	745
Canadian managers*	48
Total portfolio managers employed	**8,171**
Total security analysts employed	**6,212**
Stocks watched closely (average)	
By banks	278
By insurance cos.	230
By investment counselors	237
Stocks watched generally (average)	
By banks	858
By insurance cos.	930
By investment counselors	969
Percentage of in-house research (average)	
By banks	56
By insurance cos.	63
By investment counselors	67
No. of managers using options	**233**
No. of managers using stock-index futures	**128**
No. of managers using fixed-income futures	**252**
Total discretionary assets managed ($ millions)	**4,601,881**
Top 500	4,105,974
Top 100	2,622,017
Tax-exempt discretionary assets managed ($ millions)	**2,174,916**
Top 500	2,104,644
Top 100	1,456,069
02.Tax-exempt discretionary assets managed ($ millions)	
Banks, trust cos. and subsidiaries	706,484
Insurance cos. and subsidiaries	625,237
Investment counselors	843,195
Real estate assets managed ($ millions)	**201,246**
Equity real estate	102,570
Mortgages	98,676
Indexed assets managed ($ millions)	**243,531**
Equity index	195,875
Bond index	47,656
International assets managed ($ millions)	**96,495**
Equity	77,087
Bonds	16,686
Cash	2,722
Assets invested in GICs ($ millions)	**144,602**
Assets invested for 401(k) / 457 plans ($ millions)	**146,363**
Assets invested in dedicated/immunized funds ($ millions)	**58,841**

*All other statistics exclude Canadian managers


Who manages the money?
(the top 100)


Who manages the money?
(the top 500)

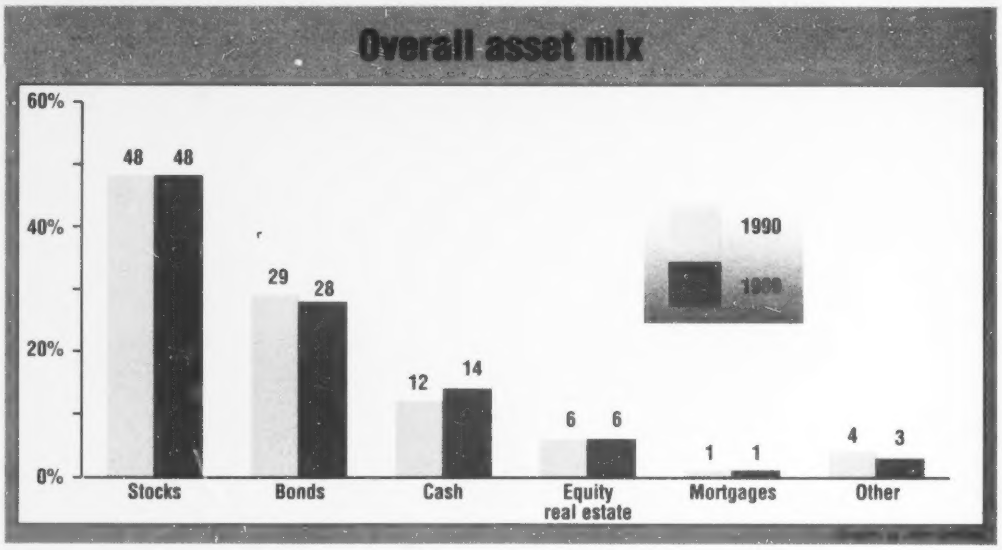

Top 500 money managers' average asset mix

Tax-exempt asset mix (by adviser)

	Banks	Insurance companies	Investment counselors
Stocks	42%	44%	50%
Bonds	41	29	25
Cash	12	9	12
Equity real estate	2	8	6
Mortgages	1	5	1
Other	2	5	6

Canadian asset mix

Canadian equities	36%
U.S. equities	6
Bonds	38
Cash	10
Equity real estate	6
Mortgages	0
Other	4


Overall asset mix

Statistics gathered from questionnaires

The data contained in the story, profiles, charts and tables in this special issue were developed by *Pensions & Investments* from answers to questionnaires.

Detailed questionnaires were sent to client contacts or chief investment officers at more than 2,300 banks, trust companies, insurance companies and independent investment firms in North America and abroad.

International/global and real estate managers are included in this issue, although *P&I* will publish separate, detailed directories on those subjects June 25 and Sept. 3, respectively.

A team of editorial staff members in Chicago worked on this issue — the 17th annual directory — for almost five months.

All quantifiable answers to the questionnaires were entered into a spreadsheet program from which the charts, tables and other statistics were drawn.

All information, except where noted, is as of Jan. 1.

As in previous years, managers were asked to provide the tax-exempt institutional asset mix; kinds, numbers and names of tax-exempt institutional clients; areas of investment capabilities; a description of their investment approaches to stocks, bonds and real estate, where appropriate; names and titles of the chief investment officer and client contact; the parent company, if any; and dollar amounts invested in categories such as equity real estate, mortgages, foreign investments, indexed funds and dedicated or immunized portfolios.

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Managers ranked by tax-exempt* assets

Firm	$ mils.
1. Bankers Trust	79,829
2. Wells Fargo	78,630
3. State Street Bank	54,077
4. Metropolitan Life	49,084
5. Prudential Investment	45,351
6. Aetna Life	44,985
7. J.P. Morgan	44,018
8. Alliance Capital	29,190
9. G.E. Investment	27,370
10. Mellon Capital	27,310
11. Equitable Capital	27,067
12. CIGNA Asset	26,798
13. Travelers	24,690
14. Jennison Associates	21,709
15. Miller, Anderson & Sherrerd	21,397
16. Pacific Investment	21,081
17. Capital Guardian	20,439
18. Loomis, Sayles	20,197
19. Equitable Real Estate	20,054
20. Fidelity Investments	19,112
21. Principal Financial	18,605
22. John Hancock	17,598
23. Mellon Bond	17,581
24. Chase Investors	16,604
25. Delaware Investment	15,941
26. Boston Co.	15,328
27. Sanford C. Bernstein	14,555
28. Chancellor Capital	14,535
29. RCM Capital	14,465
30. Lehman Ark	13,904
31. Morgan Stanley	13,630
32. Lincoln Capital	13,456
33. Brinson Partners	13,411
34. Oppenheimer Capital	13,250
35. Fayez Sarofim	13,105
36. Merrill Lynch Asset	12,950
37. INVESCO Capital	12,900
38. Trust Co. of the West	12,819
39. New York Life	12,643
40. Lazard Freres	12,623
41. State Street Research	12,548
42. Boatmen's Trust	12,535
43. Massachusetts Mutual	12,467
44. ANB Investment	11,529
45. Bank of New York	11,113
46. Wellington Mgmt.	10,974
47. Prudential Fixed Income	10,720
48. Scudder, Stevens & Clark	10,718
49. Fischer, Francis, Trees	10,000
50. Capital Research & Mgmt.	9,800
51. Fidelity Mgmt. Trust	9,776
52. NCNB Nat'l Bank	9,727
53. Copley Real Estate	9,500
54. T. Rowe Price Associates	9,395
55. Northern Trust	9,163
56. Duff & Phelps Mgmt.	8,971
57. Mitchell Hutchins	8,908
58. BEA Associates	8,877
59. Harris Investment Mgmt.	8,739
60. JMB Institutional Realty	8,639
61. Barrow, Hanley, Mewhinney	8,478
62. Ameritrust	8,393
63. Lincoln Nat'l Investment	8,273
64. Neuberger & Berman	8,265
65. Criterion Investment	8,008
66. Transamerica Investment	7,783
67. PRIMCO Capital Mgmt.	7,500
68. McMorgan	7,300
69. Batterymarch Financial	7,297
70. Putnam	7,157
71. Investment Advisers	7,100
72. Great-West Life	7,023
73. Nat'l Bank of Detroit	7,000
74. MONY	6,912
75. Citizens & Southern	6,759
76. Provident Nat'l Assurance	6,651
77. Grantham, Mayo	6,454
78. First Wachovia	6,432
79. Stein Roe & Farnham	6,306
80. Dodge & Cox	6,200
81. Northern Investment Mgmt.	6,124
82. Capital Supervisors	6,084
83. ASB Capital	6,061
84. Sears Investment	6,013
85. Nat'l Investment Services	5,968
86. Discount Corp./N.Y.	5,921
87. Prudential Realty	5,847
88. Mutual Benefit Life	5,760
89. Manufacturers Nat'l/Detroit	5,747
90. Security Pacific	5,739
91. Heitman Advisory	5,715
92. Chemical Investment	5,621
93. Continental Assurance	5,584
94. Western Asset Mgmt.	5,568
95. Rosenberg Institutional	5,561
96. Nationwide Life	5,552
97. Vanguard Group	5,537
98. Fiduciary Trust Co. Int'l	5,383
99. Trinity Investment	5,306
100. MacKay-Shields	5,297
101. Pacific Financial	5,245
102. PanAgora Asset	5,217
103. Brown Brothers Harriman	5,186
104. Columbia Mgmt.	5,133
105. Dimensional Fund Advisors	5,042
106. Sun Bank Capital	5,000
107. Mutual of America	4,986
108. Standish, Ayer & Wood	4,960
109. Morley Capital	4,700
110. First Fidelity Bancorp.	4,671
111. Trusco Capital	4,600
112. Payden & Rygel	4,590
113. Denver Investment	4,560
114. Bank One Indianapolis	4,500
115. Hartford Life	4,500
116. First Interstate/California	4,450
117. Shields Asset	4,417
118. First Union Nat'l Bank	4,400
119. UNUM Life	4,304
120. IDS Equity-Fixed Income	4,264
121. Fleet-Norstar	4,200
122. STW Fixed Income	4,186
123. Newbold's Asset	4,116
124. United Capital	4,112
125. Aldrich, Eastman & Waltch	4,100
126. Glenmede Trust	4,000
127. Nat'l City Bank	4,000
128. Mellon Equity	3,959
129. Forstmann-Leff	3,929
130. Mississippi Valley	3,900
131. Crown Life	3,857
132. Weiss Peck & Greer	3,831
133. American Capital Mgmt.	3,785
134. Independence Investment	3,779
135. Boylston Capital	3,754
136. State Mutual	3,722
137. TSA Capital	3,722
138. Dewey Square	3,621
139. Constitution Capital	3,603
140. Baring Int'l	3,586
141. Hotchkis & Wiley	3,556
142. First Kentucky Trust	3,500
143. Dreman Value Mgmt.	3,495
144. M.D. Sass	3,458
145. First Asset	3,400
146. Kennedy Associates	3,398
147. Connecticut Mutal Life	3,351
148. Provident Investment	3,323
149. Mercantile-Safe Deposit	3,301
150. GAMCO Investors	3,282
151. United Missouri	3,266
152. Old Kent Bank	3,250
153. Lord, Abbett	3,228
154. Todd Investment	3,203
155. Bear Stearns	3,199
156. Franklin Portfolio	3,182
157. TCW Realty	3,165
158. Wright Investors'	3,139
159. Geewax, Terker	3,100
160. Allstate Life	3,087
161. Rowe Price-Fleming Int'l	3,063
162. Provident Capital	3,028
163. RREEF Funds	2,985
164. Schroder Capital	2,977
165. Pittsburgh Nat'l Bank	2,899
166. Wilshire Asset	2,893
167. Luther King Capital	2,890
168. Morgan Grenfell Investment	2,882
169. Corporate Property Investors	2,800
170. Manning & Napier	2,800
171 First Wisconsin Trust	2,798
172. Goldman Sachs Asset	2,779
173. Washington Square	2,777
174. Comerica Capital	2,752
175. Manufacturers Life	2,751
176. Templeton Int'l	2,747
177. Capitoline Investment	2,711
178. Cooke & Bieler	2,704
179. Invst. Counselors/Maryland	2,689
180. Connecticut Nat'l Bank	2,654
181. Lowe, Brockenbrough	2,564
182. The Phoenix	2,560
183. Shearson Asset	2,558
184. Dillon, Read	2,556
185. Sit Investment	2,526
186. U.S. Trust/N.Y.	2,500
187. Sovran Capital	2,430
188. First Manhattan Capital	2,425
189. Pacific Financial Research	2,418
190. J.H. Ayres	2,400
191. Certus Financial	2,400
192. LaSalle Advisors	2,400
193. F.I.A. Associates	2,371
194. Cashman, Farrell	2,345
195. J&W Seligman	2,341
196. Penn Mutual	2,329
197. Texas Commerce	2,326
198. Nomura Capital	2,313
199. Olympic Capital	2,267
200. IDS Trust	2,202
201. Kemper Asset	2,201
202. Fifth Third Bank	2,200
203. PRIMECAP	2,186
204. Eagle Asset	2,168
205. Concord Capital	2,140
206. Hibernia Nat'l Bank	2,132
207. Home Life	2,129
208. Massachusetts Financial	2,118
209. Strong/Corneliuson	2,110
210. Associated Capital	2,100
211. Columbus Circle	2,100
212. Fleet/Norstar	2,100
213. Smith Barney	2,053
214. AmSouth Bank	2,051
215. McGlinn Capital	2,040
216. Gardner & Preston Moss	2,033
217. John W. Bristol	2,000
218. Jones Lang Wootton	2,000
219. Confederation Life	1,976
220. Indiana Investment	1,950
221. PRIFORM Investment	1,928
222. Balcor	1,900
223. Thompson, Siegel	1,897
224. M & I Investment	1,884
225. Warburg Investment	1,863
226. T. Rowe Price Guaranteed	1,825
227. Jundt/Capen Associates	1,814
228. WorldInvest	1,812
229. 1838 Investment Advisors	1,810
230. Munder Capital	1,801
231. Oechsle Int'l	1,788
232. United of Omaha	1,750
233. First Kentucky	1,744
234. First Pacific	1,728
235. Union Labor Life	1,725
236. Atalanta/Sosnoff	1,724
237. Reams Asset	1,717
238. BancOklahoma Trust	1,714
239. W.R. Lazard	1,708
240. Merganser Capital	1,703
241. Avatar Associates	1,700
242. Nicholas-Applegate	1,688
243. Southeastern Asset	1,678
244. First Quadrant	1,674
245. Harris Associates	1,651
246. Yarmouth Group	1,650
247. Wentworth Hauser & Violich	1,644
248. Sovran Bank	1,624
249. Sentinel Real Estate	1,618
250. Dreyfus	1,603
251. O'Connor Group	1,600
252. NWQ Investment	1,571
253. Warburg, Pincus	1,528
254. General American Life	1,508
255. Amalgamated Bank/N.Y.	1,500
256. CoreStates Investment	1,500
257. Glickenhaus	1,500
258. Hagler, Mastrovita & Hewitt	1,474
259. Southwestern Life	1,474
260. Riggs Investment	1,468
261. Reich & Tang	1,457
262. Merchants Investment	1,433
263. First Investment	1,425
264. Union Central Life	1,423
265. Ameritrust Texas	1,418
266. Stacey Braun	1,415
267. Beutel, Goodman Capital	1,404
268. Hawaiian Trust	1,400
269. Barnett Banks	1,397
270. PCM Int'l	1,367
271. Merus Capital	1,346
272. Daniel Breen	1,335
273. Bradford & Marzec	1,322
274. INTECH	1,321
275. First Interstate/Oregon	1,316
276. Latimer & Buck	1,314
277. Siebel Capital	1,309
278. Liberty Nat'l Bank & Trust	1,304
279. C.S. McKee	1,300
280. Aon Advisors	1,295
281. One Federal Asset	1,295
282. Analytic Investment	1,287
283. Wilmington Capital	1,284
284. Wolf, Webb, Burk	1,278
285. Security Capital Mgmt.	1,270
286. Meridian Investment	1,247
287. Chicago Title	1,238
288. First Tennessee	1,222
289. Institutional Capital	1,217
290. Pilgrim Baxter Greig	1,213
291. LaSalle Nat'l Bank	1,205
292. Brundage, Story & Rose	1,201

* discretionary, tax-exempt assets

Managers ranked by tax-exempt* assets

Firm	$ mils.
293. First Wisconsin Asset	1,200
294. Midlantic Nat'l Bank	1,200
295. McCowan Associates	1,197
296. Baring America Asset	1,191
297. Investors Research	1,183
298. Ruane Cuniff	1,180
299. Chicago Corp.	1,174
300. Fred Alger	1,159
301. Sasco Capital	1,153
302. Public Storage	1,152
303. Rainier Investment	1,151
304. Renaissance Investment	1,134
305. Wilmington Trust	1,134
306. Star Bank	1,126
307. Boston Int'l	1,124
308. Axe-Houghton	1,123
309. Trammell Crow	1,119
310. Smoot, Miller, Cheney	1,109
311. SLH Asset	1,107
312. First Interstate/Washington	1,100
313. Integra Financial	1,100
314. MPT Associates	1,100
315. Northern Capital	1,092
316. Lomas Advisors	1,066
317. Eaton Vance	1,062
318. David J. Greene	1,056
319. Dean Investment	1,045
320. Back Bay Advisors	1,041
321. Citizens Fidelity	1,040
322. Hoisington Investment	1,040
323. CMB Investment	1,034
324. Tom Johnson Investment	1,032
325. Donald Smith	1,026
326. Lieber & Co.	1,023
327. W.H. Reaves	1,007
328. First Security	1,000
329. Prudential Bache	1,000
330. Hellman, Jordan	998
331. Beacon Capital	996
332. Qualivest Capital	982
333. Alex. Brown	977
334. William Blair	970
335. Advanced Investment	960
336. Morgan Grenfell Capital	954
337. Richmond Capital	952
338. Acorn Asset	950
339. Westwood Mgmt.	950
340. Fiduciary Mgmt.	947
341. Federated Investment	940
342. Marinvest	935
343. Hill Samuel/Investment	932
344. WEDGE Capital	930
345. Harbor Capital	927
346. Spears Benzak Salomon	925
347. Lee, Robinson & Steine	908
348. Mellon/McMahan	907
349. Consistent Asset	905
350. Peregrine Capital	904
351. Commerce Bank	903
352. L.J. Melody	900
353. Argus Investors' Counsel	899
354. Brandywine Asset	890
355. Lynch & Mayer	876
356. Lexington Mgmt.	867
357. Frontier Capital	863
358. Bessemer Trust	857
359. Sirach Capital	854
360. Ariel Capital	851
361. Cabot, Cabot & Forbes	850
362. United States Trust	850
363. Acadian Asset	838
364. Property Capital	830
365. Ashland Mgmt.	827
366. Hamilton, Allen	825
367. KR Capital	825
368. GeoCapital	819
369. Seattle-First Nat'l	819
370. Wertheim Schroder	818
371. Equitable Agri-Business	813
372. Hanson Investment	812
373. Capstone Asset	805
374. Reimer & Koger	805
375. Vaughan Nelson	800
376. Continental Capital	799
377. Provident Mutual	796
378. Nat'l Westminster Bank	793
379. Morgan Stanley/Chicago	792
380. Lehndorff & Babson	781
381. BayBanks Investment	780
382. Quanti-Logic Asset	775
383. RNC Capital	760
384. Matrix Capital	758
385. First Nat'l Bank/Omaha	750
386. HGK Asset	750
387. McCullough Andrews	750
388. Cramblit & Carney	742
389. Coldwell Banker Comm'l	732
390. Karsten Realty	726
391. Centre Square	721
392. Chicago Asset	709
393. Globe Finlay	701
394. Mercator Asset	700
395. Financial Counselors	699
396. Julius Baer	693
397. Sound Shore Mgmt.	684
398. Anhalt/O'Connell	682
399. Peters, Gamm, West	680
400. SAFECO Asset	679
401. Daniel S. Kampel	676
402. Seattle Capital	673
403. Waddell & Reed Asset	659
404. David L. Babson	658
405. Franklin Asset	650
406. Union Bank	650
407. Cutler	647
408. Essex Investment	642
409. Mathers	642
410. Valley Capital	641
411. Van Deventer & Hoch	638
412. General American	628
413. Morison Asset	628
414. Skye Investments	628
415. Crestar Bank	617
416. Investment Advisors	616
417. Sterling Capital	611
418. Weaver C. Barksdale	610
419. Mellon-Pictet Int'l	610
420. Prescott Asset	610
421. Manufacturers Hanover	605
422. Keystone Investment	604
423. George D. Bjurman	603
424. Huntington Trust	600
425. Roll & Ross Asset	600
426. Travelers Investment	600
427. Pioneering Mgmt.	597
428. Smith Affiliated	594
429. IDS Int'l	592
430. Bowen, Hanes	590
431. Mercantile Bank/St. Louis	587
432. Estabrook Capital	580
433. Investment Research	580
434. Team Bank	580
435. NewSouth Capital	573
436. First Maryland Asset	569
437. United Jersey Bank	562
438. Roanoke Asset	560
439. West One/Idaho	558
440. Continental Asset	556
441. Hahn Holland & Grossman	555
442. Quest Advisory	555
443. Colorado Capital	553
444. Bigler/Crossroads	550
445. Birtcher Realty	543
446. Froley, Revy	542
447. Webster Mgmt.	540
448. Philippe Investment	539
449. Dreyfus Realty	535
450. Furman Selz Capital	531
451. James Investment Research	530
452. Signet Asset	528
453. Capital Advisors	527
454. SBC Portfolio	525
455. Eastdil Realty	520
456. Capitalcorp	515
457. Daiwa Int'l	512
458. Montag & Caldwell	512
459. Rosen Associates	510
460. Nikko Capital	507
461. Trustcorp Bank Ohio	507
462. Branch Banking & Trust	500
463. Horsley Keogh	500
464. Leavy Investment	500
465. Life Insurance Co./Georgia	500
466. Rampart Investment	500
467. Tukman Capital	500
468. Unity Management	500
469. Value Line	500
470. American Nat'l Bank	495
471. Marine Investment Mgmt.	495
472. Banc One Asset	491
473. John McStay Investment	485
474. Schaenen Wood	480
475. HT Investors	475
476. R. Meeder	475
477. N.M. Rothschild Int'l	473
478. Leominster	468
479. MIDCO Investors	463
480. Abbott Capital	460
481. JCW Investments	459
482. Marsh/Cunningham/Cast.	458
483. MIG	455
484. MIMLIC Asset	455
485. Deposit Guaranty Nat'l	451
486. Ohio Co.	451
487. Arnhold & S. Bleichroeder	450
488. Nicholas	450
489. Capital Consultants	448
490. G.T. Capital	444
491. Dominion Trust	441
492. Ameritas Investment	440
493. Bennett/Kahnweiler Realty	440
494. Wells Fargo Realty	439
495. PMRealty Advisors	438
496. Oak Associates	437
497. Crabbe-Huson	435
498. Parametric Portfolio	433
499. Atlantic Portfolio	431
500. Ferguson & Wellman	430
501. Gofen & Glossberg	430
502. Harris Bretall Sullivan	426
503. Marine Bank	425
504. First Alabama Bank	418
505. Windham Capital	416
506. Central Fidelity Bank	414
507. Moran Asset	414
508. County NatWest	412
509. Ryan Labs	412
510. AMR Investment Services	411
511. Growth Stock Outlook	407
512. Heartland Capital	406
513. Dauphin Deposit Bank	404
514. Ward & Wissner	403
515. Rice, Hall, James	402
516. Fiduciary Capital	400
517. First Interstate/Arizona	400
518. Yeager, Wood & Marshall	400
519. Greenleaf Capital	399
520. Citicorp Investment	394
521. Pinnacle Associates	390
522. Wilkens & Nanovic	390
523. HD Int'l	388
524. Western Reserve Capital	388
525. Kirr, Marbach	386
526. Campbell Advisors	384
527. Securities Counselors/Iowa	377
528. Management Asset	376
529. Trevor Stewart Burton	371
530. Citytrust	370
531. BMI Capital	369
532. Premier Investment	367
533. DB Capital Mgmt. Int'l	366
534. Harris Derivative	365
535. RSSI	362
536. Investment Counsel	361
537. Markston Investment	360
538. Portfolio Group	359
539. Bartlett	358
540. Baxter Capital	358
541. Gulf Investment	358
542. Stamford Co.	358
543. Wood, Struthers & Winthrop	356
544. INVESCO MIM Int'l	353
545. Palley-Needelman Asset	353
546. Inverness Counsel	350
547. Krehbiel & Hubbard	350
548. PSM Investors	350
549. Van Kampen Merritt	350
550. Fort Hill Investors	348
551. BK Associates	346
552. Haven Capital	346
553. Securities Counsel	345
554. NML Equity Services	341
555. Wall Street Associates	340
556. Rothschild	335
557. Rittenhouse Financial	328
558. Arnold Investment	325
559. Cambiar Investors	325
560. Capital Investment	325
561. Dearden, Maguire & Weaver	325
562. Fisher Investments	324
563. Frost Nat'l Bank	324
564. Princeton Bank & Trust	324
565. ValueQuest	320
566. JMC Capital	313
567. Piedmont Realty	310
568. Stratton Mgmt.	310
569. Posthorn Global	309
570. Ashfield	308
571. Piper Capital	308
572. Johnson Investment	306
573. Bailard Biehl & Kaiser	300
574. Burnham	300
575. Leykegian Investment	300
576. Merchants Nat'l Bank	300
577. Petersen, Flynn & Dinsmore	300
578. Roulston	300
579. Schroder Real Estate	300
580. Shearson Equity	300
581. Beutel, Goodman Int'l	298
582. First Commerce	298
583. Delafield Asset	294
584. Nelson Benson & Zellmer	293
585. Bank of Toyko	290
586. NCM Capital Mgmt.	289
587. AFL-CIO Housing/Building	287
588. Durkee Capital	286

* discretionary, tax-exempt assets

Managers ranked by tax-exempt* assets

Firm	$ mils.
589. Mutual Service Life	279
590. NFJ Investment	273
591. Madison Investment	272
592. Magten Asset	271
593. Chelsea Mgmt.	269
594. Investment Mgmt. Services	267
595. American Asset	266
596. Amalgamated Trust	265
597. Marvin & Palmer	265
598. Lombard Odier	264
599. Roger Engemann	260
600. Wilson, Kemp	260
601. Garrett Realty Advisors	257
602. Mount Lucas	257
603. Evans & Moxon Capital	256
604. Capital Technology	255
605. Dietche & Field	253
606. Dana Investment	250
607. FFCA Institutional	250
608. Sanwa Bank California	250
609. Walter Scott Int'l	250
610. United Investment	250
611. Carret	247
612. Income Research & Mgmt.	246
613. Cowen Asset	244
614. Murray Johnstone Int'l	243
615. P.E. Becker	242
616. Kleinwort Benson Int'l	242
617. First Midwest Asset	240
618. U.S. Nat'l Bank/Galveston	240
619. Grubb & Ellis Realty	234
620. Flippin, Bruce & Porter	233
621. George B. Springman	231
622. Burridge Group	230
623. Hutson Mgmt.	228
624. Austin & Calvert	225
625. C-S Capital Advisors	225
626. Bank of Boston	221-
627. Crawford Investment	216
628. First Nat'l Bank/Amarillo	216
629. Van Eck Associates	213
630. Burgess Capital	212
631. Norwest Capital	209
632. Virginia Investment	205
633. Aronson & Fogler	200
634. Campbell, Reed, Conner	200
635. IAA Trust	200
636. Liberty Capital	200
637. Manufacturers & Traders	200
638. Meridian Mgmt.	200
639. Mid State Capital	200
640. Sprout Group	200
641. Torch Energy	200
642. Woodmont Realty	200
643. Associated Kellogg Bank	197
644. First Source Bank	196
645. Bank IV	195
646. Cadinha	195
647. Kirkpatrick, Pettis	195
648. Martin Currie	193
649. Bank South	192
650. Douglas Capital	192
651. Amerindo Investment	191
652. Bishop Trust	189
653. Kahn Brothers	186
654. Cadence Capital	183
655. Summit Trust	183
656. Davis Weaver & Mendel	180
657. FirsTier Bank	180
658. Greenwood Capital	180
659. Heber, Fuger, Wendin	180
660. Metric Institutional Realty	179
661. William D. Witter	179
662. Calamos Asset	178
663. Nat'l Bank of Commerce	178
664. Wardley Investment	178
665. American Nat'l/St. Paul	175
666. Verus Capital	175
667. Anchor Capital Advisors	174
668. City Nat'l Bank	173
669. Dunedin Fund	171
670. Composite Research Mgmt.	165
671. MacKenzie Investment	165
672. Narragansett Capital	165
673. Cramer Rosenthal McGlynn	164
674. First N H Investment	164
675. Qualified Counseling	163
676. Argus Investment	162
677. Gradison Investment	160
678. Philadelphia Investment	160
679. Target Investors	160
680. AFA Financial	159
681. Alex. Brown Realty	159
682. Chase Investment	156
683. IDS Growth Spectrum	156
684. Winrich Capital	156
685. Emerging Markets Mgmt.	155
686. Merchants Bank	155
687. Columbus Bank & Trust	153
688. Foxhall Investment	153
689. Hallmark Capital	153
690. Society Bank/Michigan	153
691. Alpine Capital	150
692. Amoskeag Bank	150
693. Capital Advisors	150
694. Davis Hamilton	150
695. First Interstate/Nevada	150
696. Hamilton Investments	150
697. IBJ Schroder Bank & Trust	150
698. Key Trust of Maine	150
699. Mesirow Asset	150
700. Stuyvesant Capital	149
701. Marquette Bank Minneapolis	148
702. Abel/Noser	145
703. Gabelli-O'Connor Fixed	145
704. Paradigm Partners	145
705. US Trust/California	145
706. Ivory & Sime Int'l	144
707. Seaboard Investment	144
708. Cohen & Steers Capital	143
709. Newbold's Investment	143
710. Willoughby Holin	143
711. Breau Capital	142
712. FBW Investment	142
713. Clifton Group	140
714. Rocky Mountain Investors	140
715. Cedar Hill	137
716. Potomac Asset	136
717. Systematic Financial	135
718. Thompson/Rubenstein	135
719. Roxbury Capital	134
720. Marathon Asset	133
721. Richard Fontaine	132
722. D.F. Dent	130
723. Fox Asset	130
724. Turner Neill Investment	130
725. Investment Counselors	129
726. NM Capital	129
727. Credit Suisse Asset	127
728. Ambs Investment	125
729. Bridgewater Associates	125
730. Commercial Capital	125
731. EMP Capital	125
732. Gateway Investment	125
733. Investors Mgmt. Services	125
734. Legg Mason	125
735. Travelers Keystone	125
736. Equitec Institutional Realty	123
737. Sullivan, Morrissey & Mickle	122
738. J.D. Martin	121
739. Bollinger	120
740. Garrison, Keogh	120
741. Kempner Capital	117
742. Carl Domino	115
743. Nat'l Property	114
744. Benchmark Asset	112
745. Key Trust Co./Northwest	112
746. Arnold Boys	111
747. AIM Capital	110
748. Lincoln Asset	110
749. BZW Investment	108
750. Caldwell & Orkin	108
751. London Investment	108
752. Cook Inlet Investment	107
753. Windsor Financial	103
754. Dougery, Wilder	102
755. Franklin R&D	102
756. Windsor Realty	101
757. Balch, Hardy, Scheinman	100
758. Bank One Dayton	100
759. Coen & Densmore	100
760. Hyperion Capital	100
761. Institutional Portfolio	100
762. Southport Financial	100
763. First Financial Mgmt. & Trust	98
764. Morse, Williams	98
765. Allbritton Capital	97
766. Valley Bank/Nevada	97
767. Churchill Mgmt.	95
768. D.A. Mgmt.	95
769. EMG Advisors	94
770. Armstrong Shaw	90
771. Bradford Investment	90
772. Corbyn Associates	90
773. Resource Investors	90
774. Wilson Foster	90
775. IDC Portfolio	89
776. Brandes Investment	88
777. Merchants Nat'l Bank	87
778. Gintel Equity	86
779. Davenport & Co. of Va.	85
780. Excalibur Mgmt.	85
781. Triangle Portfolio	85
782. Derby	82
783. AMB Institutional Realty	81
784. Thorson, Brown & Plunkett	81
785. Financial Aims	80
786. Kayne, Anderson Investment	80
787. Nelson Capital	80
788. Oak Hall Capital	79
789. Thompson, Unger & Plumb	78
790. Am Cal Advisors	77
791. Home Capital Services	77
792. Daniel H. Renberg	76
793. Athene Coronado Mgmt.	75
794. Baron Capital Mgmt.	75
795. Leshner Financial	75
796. Babson-Stewart Ivory Int'l	73
797. Cabanne Smith	73
798. CIMG	72
799. PRIMA	72
800. Shearson Mgmt.	72
801. Delta Financial	71
802. Wasatch Advisors	71
803. AIG Global	70
804. ICM Asset	70
805. Longfellow Investment	70
806. Synder Capital	70
807. Jefferson Nat'l Bank	69
808. McMillion/Eubanks Capital	69
809. Bounty Capital Mgmt.	68
810. Cumberland Advisors	68
811. Mercantile Nat'l/Indiana	68
812. RXR Group	68
813. Starbuck, Tisdale	68
814. American Income Plus	67
815. Sumitomo Bank/California	67
816. Interfid Capital	66
817. Ronald Sadoff's Major	65
818. GIM Global	63
819. Heritage Investors	63
820. Connors Investor Services	62
821. Kanne, Paris & Hoban	62
822. McBryan Malone & Russell	61
823. Martingale Asset	60
824. U.S. Bank	60
825. Yamaichi Int'l Capital	60
826. Security Pacific/Oregon	59
827. Fidelity Mutual Group	58
828. Delta Financial	56
829. Calcasieu Marine Nat'l	55
830. Jamison, Eaton & Wood	55
831. Kennedy Capital Mgmt.	55
832. Dawes Investment	53
833. Lipman, Carasso	53
834. First Citizens Nat'l Bank	52
835. Atlanta Capital	50
836. Bankers Trust Co./Iowa	50
837. Evergreen Asset	50
838. Fiduciary Counsel	50
839. Interinvest	50
840. Liquidity Fund Investment	50
841. Conus & Nicholson	48
842. Parmelee Mgmt.	48
843. Robshaw & Cheskin	47
844. BTR Capital	45
845. Cisneros Asset	44
846. Addison Capital	43
847. Ronald B. Haave	43
848. Mt. Auburn	43
849. Berg Capital	42
850. Granahan Investment	42
851. Justin Asset	42
852. Kanawha Capital	41
853. Aegon USA Investment	40
854. Bane Barham & Holloway	40
855. ERIAC	40
856. Geneva Capital	40
857. Guild Investment	40
858. Hambrecht & Quist	40
859. Heilweil Hollander Jacobs	40
860. Marlborough Capital	40
861. Steven A. Noroian	40
862. PaineWebber Asset	40
863. Peckham Boston	40
864. Pension Mgmt.	40
865. Wilkinson Boyd Asset	40
866. Portfolio Capital	39
867. Forest Investment	38
868. Richter Asset	38
869. R.W. Graybill	37
870. Guaranty Trust/Missouri	37
871. Edgewood Mgmt.	36
872. Noddings Investment	36
873. Northwest Quadrant	35
874. Concord Investment	34
875. Emprise Bank	33
876. Union Capital	33
877. Wagner & Hamil	33
878. Bank of the West Trust	32
879. C.J. Lawrence	32
880. John Stewart Darrell	31
881. Florence Fearrington	31
882. Cullen, Fortier Asset	30
883. Jacobs Levy Equity	30
884. Palm Beach Capital	30

* discretionary, tax-exempt assets

Managers ranked by tax-exempt* assets

Firm	$ mils.
885. Pierson Capital	30
886. Fraser Mgmt. Associates	29
887. Lehigh Valley Bank	29
888. MSR Advisors	29
889. Buffalo Capital	28
890. Value Matrix	28
891. Wedgewood Capital	28
892. Yasuda Bank & Trust	28
893. James River Capital	27
894. Marsh & Cunningham	27
895. Numeric Investors	27
896. Taplin, Canida & Habacht	27
897. American Fund Advisors	26
898. Ariston Capital	26
899. Crescent Capital	26
900. Baxter Brothers	25
901. Capital Strategy Group	25
902. IFP	25
903. London & Bishopgate Int'l	25
904. MH & Associates	25
905. Van Cleef Jordan & Wood	25
906. Hodges Capital	24
907. Parker Dillon Carlson	24
908. Millburn	23
909. Rock Capital	23
910. Davidson, Garrard & Goode	22
911. O'Herron	22
912. Piedmont Capital	22
913. Meridian Capital	21
914. Spectrum Asset	21
915. Financial Guaranty	20
916. Fine Capital Mgmt.	20
917. Furgueson Capital	20
918. Wayne Hummer Mgmt.	20
919. Perkins Capital	20
920. Steele	20
921. Strategic Investment	20
922. Ward & Associates Asset	20
923. Muhlenkamp	19
924. Stratton Capital	19
925. Vector Money Mgmt.	19
926. Hayden, Tolzmann	18
927. R.M. Leary	18
928. Sheffield Investment	18
929. Trendstat Capital	18
930. Princeton Investment	17
931. Baillie Gifford Overseas	16
932. Computime Institutional	16
933. Kreger Capital	16
934. Portfolio Timing	16
935. WFG Investment	16
936. Equity Investment	15
937. Red Oak Advisors	15
938. Security Funding	15
939. Simpson Capital	15
940. Douglas, Noyes	14
941. Fenimore Asset	14
942. Interstate Asset	14
943. American Agricultural	13
944. Karpus Investment	13
945. Oakwood Counselors	13
946. Edward C. Rorer	13
947. Trascott, Alyson, Craig	13
948. Coughlin Asset	12
949. John M. Cunningham	12
950. Morrison, Karsten, Ramzy	12
951. Security Investors	12
952. Summit Investment	12
953. Wm. A. Inskeep	11
954. David E. Ware	11
955. W. David Dileo	10
956. Fiske Capital	10
957. Graistone Realty	10
958. Investors Research	10
959. Alan B. Lancz	10
960. Touche Remnant	10
961. Leonard Mgmt. Group	9
962. Aegis Capital	7
963. Audit Investments	7
964. Eager Street Asset	7
965. Edinburgh-Wilmington Int'l	7
966. RPI Institutional	7
967. Berger Associates	6
968. Contravisory Investment	6
969. Dollins Symons	6
970. IDS Financial	6
971. Penn Square	6
972. Advanced Quantitative	5
973. Albion Mgmt. Group	5
974. Allegiance Capital	5
975. James Capel	5
976. GeoVest Advisors	5
977. Investment Mgmt.	5
978. Kenwood Group	5
979. RAC Advisors	5
980. Ramsay Investment	5
981. Salomon Brothers Asset	5
982. Tealwood Asset	5
983. Trident Investment	5
984. UBS Phillips & Drew	5
985. Vanguard Capital	5
986. Boston Asset	4
987. J.C. Goodgal	4
988. KAS Investment Consultants	4
989. Platner & Associates	4
990. Cypress Asset	3
991. North American Capital	3
992. Townsend Asset	3
993. Apex Asset	2
994. Cashen Investment	2
995. Keeley Asset	2
996. MLP Advisory	2
997. Nicholson Group	2
998. PIMS Investment	2
999. Bank of Ireland	1
1000. Ferguson Investment	1
1001. First Austin Capital	1
1002. Lingo Capital	1
1003. Clean Yield Asset	0.6
1004. TEL Advisors of Virginia	0.5
1005. Hewitt Capital	0.3
1006. Economic Resources	0.2
1007. Acquest Capital	0
1008. American Capital	0
1009. Amli Institutional	0
1010. Batterymarch: Agrivest	0
1011. Chrysalis Investments	0
1012. Commerz Int'l Capital Mgmt.	0
1013. Compass Technology	0
1014. Cornerstone Asset	0
1015. Cotswold Mgmt.	0
1016. Debenham, Tewson	0
1017. Disciplined Portfolio	0
1018. Eastbridge Capital	0
1019. First Interstate Bank/Denver	0
1020. First Wilshire Securities	0
1021. Gaiacorp U.S.	0
1022. Goodwin Capital	0
1023. Greenville Capital	0
1024. Henderson Administration	0
1025. Hourglass Capital	0
1026. Institutional Mortgage	0
1027. Jacques & Kurdziel	0
1028. Kangyo Kakumaru Capital	0
1029. Kemper Financial	0
1030. Loeb Partners Realty	0
1031. MFM Capital Mgmt.	0
1032. Mid Atlantic Realty	0
1033. Mitchell Group	0
1034. Monmouth Capital	0
1035. New Japan Capital	0
1036. NKK Scudder Capital	0
1037. Prudential Asia	0
1038. T.W. Richardson	0
1039. Rothschild Asset	0
1040. Towneley Capital Mgmt.	0
1041. Travelers Asset Mgmt. Int'l	0
1042. Trinity Capital	0
1043. Tyndall-Newport	0
1044. United Trust Fund	0
1045. USF & G Realty	0
Total	**2,174,916**

* discretionary, tax-exempt assets

Alphabetical list of managers and where they rank by tax-exempt discretionary assets

A

Abbott Cap - 480
Abel Noser - 702
Acadian Asset - 363
Acorn Asset - 338
Acquest Cap - 1,007
Addison Cap - 846
Advanced Invst - 335
Advanced Quant - 972
Aegis Cap - 962
Aegon USA - 853
Aetna Life - 6
AFA Fin - 680
AFL-CIO Housing - 587
AIG Global - 803
AIM Cap - 747
Albion Mgmt - 973
Aldrich, Eastman - 125
Alger, Fred - 300
Allbritton Cap - 765
Allegiance Cap - 974
Alliance Cap - 8
Allstate Life - 160
Alpine Cap - 691
Am Cal - 790
Amalgamated N.Y. - 255
Amalgamated Trust - 596
AMB Inst'l - 783
Ambs Invst - 728
Amer. Agri - 943
Amer. Asset - 595
Amer. Cap. N.Y. - 1,008
Amer. Cap. Texas - 133
Amer. Fund - 897
Amer. Income - 814
Amer. Nat'l - 470
Amer. Nat'l/St. Paul - 666
Amerindo Invst - 651
Ameritas Invst - 492
Ameritrust Co. Nat'l - 62
Ameritrust Texas - 265
Amli - 1,009
Amoskeag Bank - 692
AMR Invst - 510
AmSouth Bank - 214
Analytic Invst - 282
ANB Invst - 44
Anchor Cap - 667
Anhalt O'Connell - 398
Aon Advisors - 280
Apex Asset - 993
Argus Invst - 676
Argus Investors - 353
Ariel Cap - 360
Ariston Cap - 898
Armstrong Shaw - 770
Arnold Invst - 55[illegible]
Aronson & Fogler - 633
ASB Cap - 83
Ashfield - 570
Ashland - 365
Assoc. Cap - 210
Assoc. Kellogg - 643
Atalanta Sosnoff - 236
Athene Coronado - 793
Atlanta Cap - 835
Atlantic Port - 499
Audit Investments - 963
Austin & Calvert - 624
Avatar Assoc - 241
Axe-Houghton - 308
Ayres, J.H. - 190

B

Babson, David L. - 404
Babson-Steward - 796
Back Bay - 320
Baer, Julius - 396
Ballard Biehl - 573
Baillie Gifford - 931
Balch, Hardy - 757
Balcor - 222
Banc One Asset - 472
BancOklahoma - 238
Bane Barham - 854
Bank IV - 645
Bank of Boston - 626
Bank of Ireland - 999
Bank of New York - 45
Bank of the West - 878
Bank of Toyko - 585
Bank One Dayton - 758
Bank One Indianap - 114
Bank South - 649
Bankers Trust N.Y. - 1
Bankers Trust Iowa - 836
Baring Amer. - 296
Baring Int'l - 140
Barksdale, Weaver - 418
Barnett Banks - 269
Baron Cap - 794
Barrow, Hanley - 61
Bartlett - 539
Batterymarch - 69
Batterymarch Agri - 1,010
Baxter Bros - 900
Baxter Cap - 540
BayBanks Invst - 381
BEA Assoc. - 58
Beacon Cap - 331
Bear Stearns - 155
Becker, P.E. - 615
Benchmark Asset - 744
Bennett & Kahweiler - 493
Berg Cap - 849
Berger Assoc. - 967
Bernstein, Sanford - 27
Bessemer Trust - 358
Beutel, Goodman - 267
Beutel Goodman Int'l - 581
Bigler Crossroads - 444
Birtcher Realty - 445
Bishop Trust - 652
Bjurman, George - 423
BK Assoc. - 551
Blair, William - 334
Bleichroeder Int'l - 487
BMI Cap - 531
Boatmen's Trust - 42
Bollinger - 739
Boston Asset - 986
Boston Co. - 26
Boston Int'l - 307
Bounty Cap - 809
Bowen, Hanes - 430
Boylston Cap - 135
Boys, Arnold - 746
Bradford Invst - 771
Bradford & Marzec - 273
Branch Banking - 462
Brandes Invst - 776
Brandywine Asset - 354
Braun, Stacey - 266
Breau Cap - 711
Breen, Daniel - 272
Bridgewater - 729
Brinson Partners - 33
Bristol, John - 217
Brown, Alex - 333
Brown Realty, Alex - 681
Brown Bros - 103
Brundage, Story - 292
BTR Cap - 844
Buffalo Cap - 889
Burgess Cap - 630
Burnham - 574
Burridge Group - 622
BZW Invst - 749

C

Cabot, Cabot - 361
Cadence Cap - 654
Cadinha - 646
Calamos Asset - 662
Calcasieu Marine - 829
Caldwell & Orkin - 750
Cambiar - 559
Campbell, Reed - 634
Campbell - 526
Capel, James - 975
Cap. Advisors - 693
Cap. Advisors - 453
Cap. Consult - 489
Cap. Guardian - 17
Cap. Invst - 560
Cap. Res - 50
Cap. Strategy - 901
Cap. Supervisors - 82
Cap. Tech - 604
Capitalcorp - 456
Capitoline - 177
Capstone Asset - 373
Carret - 611
Cashen Invst - 994
Cashman, Farrell - 194
Cedar Hill - 715
Central Fidelity - 506
Centre Square - 391
Certus Fin - 191
Chancellor Cap - 28
Chase Invst - 682
Chase Investors - 24
Chelsea - 593
Chemical Invst - 92
Chicago Asset - 392
Chicago Corp - 299
Chicago Title - 287
Chrysalis - 1,011
Churchill Mgmt - 767
CIGNA Asset - 12
CIMG - 798
Cisneros Asset - 845
Citicorp Invst - 520
Citizens Fidelity - 321
Citizens & Southern - 75
City Nat'l Bank - 668
Citytrust - 530
Clean Yield - 1,003
Clifton Group - 713
CMB Invst - 323
Coan & Densmore - 759
Cohen & Steers - 709
Coldwell Banker - 389
Colorado Cap - 443
Columbia Mgmt - 104
Columbus Bank - 687
Columbus Circle - 211
Comerica Cap - 174
Commerce Bank - 351
Commercial Cap - 730
Commerz Int'l - 1,012
Compass Tech - 1,013
Composite Res - 670
Computime Inst'l - 932
Concord Cap - 205
Concord Invst - 874
Confederation Life - 219
Connecticut Mutual - 147
Connecticut Nat'l - 180
Connors Investor - 820
Consistent Asset - 349
Constitution Cap - 139
Continental Asset - 440
Continental Assur - 93
Continental Cap - 376
Contravisory - 968
Conus & Nicholson - 841
Cook Inlet - 752
Cooke & Bieler - 178
Copley Real Estate - 53
Corbyn - 772
CoreStates - 256
Cornerstone - 1,014
Corp. Property - 169
Cotswold - 1,015
Coughlin Asset - 948
County NatWest - 508
Cowen Asset - 61
Crabbe-Huson - 497
Cramblit & Carney - 388
Cramer Rosenthal - 673
Crawford Invst - 627
Credit Suisse - 727
Crescent Cap - 899
Crestar Bank - 415
Criterion Invst - 65
Crown Life - 131
Cullen, Fortier - 882
Cumberland - 810
Cunningham, John - 949
Currie, Martin - 648
Cutler - 407
Cypress Asset - 990
C-S Cap - 625

D

D.A. Mgmt - 768
Daiwa Int'l - 457
Dana Invst - 606
Dauphine Deposit - 513
Davenport - 779
Davidson, Garrard - 910
Davis Hamilton - 694
Davis, Weaver - 656
Dawes Invst - 832
DB Cap - 533
Dean Invst - 319
Dearden, Maguire - 561
Debenham, Tewson - 1,016
Delafield Asset - 583
Delaware Invst - 25
Delta Fin - 801
Delta Fin. Mgmt - 828
Dent, D.F. - 722
Denver Invst - 113
Deposit Guaranty - 485
Derby - 782
Dewey Square - 138
Dietche & Field - 605
DiLeo, W. David - 955
Dillon, Read - 184
Dimensional Fund - 105
Disciplined Port - 1,017
Discount Corp. NY - 86
Dodge & Cox - 80
Dollins Symons - 969
Dominion Trust - 491
Domino, Carl - 742
Dougery, Wilder - 754
Douglas Cap - 650
Douglas, Noyes - 940
Dreman Value - 143
Dreyfus Mgmt - 250
Dreyfus Realty - 449
Duff & Phelps - 56
Dunedin Fund - 669
Durkee Cap - 588

E

Eager Street - 964
Eagle Asset - 204
Eastbridge - 1,018
Eastdil Realty - 455
Eaton Vance - 317
Economic Res - 1,006
Edgewood - 871
Edinburgh-Wilming - 965
1838 Invst - 229
Emerging Markets - 685
EMG Advisors - 769
EMP Cap - 731
Emprise Bank - 875
Engemann, Roger - 599
Equitable Agri - 371
Equitable Cap - 11
Equitable Real - 19
Equitec Inst'l - 736
Equity Invst - 936
ERIAC - 855
Essex - 408
Estabrook - 432
Evans & Moxon - 603
Evergreen Asset - 837
Excalibur Mgmt - 780

F

FBW Invst - 712
Fearnington, Florence - 881
Federated Invst - 341
Fenimore Asset - 941
Ferguson Invst - 1,000
Ferguson & Wellman - 500
FFCA Inst'l - 607
F.I.A. Assoc - 193
Fidelity Investments - 20
Fidelity Mgmt - 51
Fidelity Mutual - 827
Fiduciary Cap - 516
Fiduciary Counsel - 838
Fiduciary Mgmt - 340
Fiduciary Trust - 98
Fifth Third - 202
Fin. Aims - 785
Fin. Counselors - 395
Fin. Guaranty - 915
Fine Cap - 916
First Alabama - 504
First Asset Mgmt - 145
First Austin Cap - 1,001
First Citizens Nat'l - 834
First Commerce - 582
First Fidelity - 110
First Fin - 763
First Inter. Ariz - 517
First Inter. Calif - 116
First Inter. Denver - 1,019
First Inter. Nev - 695
First Inter. Ore - 275
First Inter. Wash - 312
First Invst - 263
First Kentucky - 233
First Kentucky Trust - 142
First Manhattan - 188
First Maryland - 436
First Midwest - 617
First Nat'l Amarillo - 628
First Nat'l Omaha - 385
First NH Invst - 674
First Pacific - 234
First Quadrant - 244
First Security - 328
First Source Bank - 644
First Tennessee - 288
First Union - 118
First Wachovia - 78
First Wilshire - 1,020
First Wisc. Asset - 293
First Wisc. Trust - 171
FirsTier Bank - 657
Fischer, Francis - 49
Fisher Invst - 562
Fiske Cap - 956
Fleet/Norstar - 121
Fleet/Norstar NY - 212
Flippin, Bruce - 620
Fontaine, Richard - 721
Forest Invst - 867
Forstmann-Leff - 129
Fort Hill - 550
Fox Asset - 723
Foxhall Invst - 688
Franklin Asset - 405
Franklin Port - 156
Franklin Res - 755
Fraser Mgmt - 886
Froley, Revy - 446
Frontier Cap - 357
Frost Nat'l - 563
Furgueson Cap - 917
Furman Selz - 450

G

Gabelli-O'Connor - 703
Gaiacorp - 1,021
GAMCO Investors - 150
Gardner & Preston - 216
Garrett Realty - 601
Garrison, Keogh - 740
Gateway Invst - 732
G.E. Invst - 9
Geewax, Terker - 159
General American - 412
General American Life - 254
Geneva Cap - 856
Geocapital - 368
GeoVest Advisors - 976
GIM Global - 818
Gintel Equity - 778
Glenmede Trust - 126
Glickenhaus - 257
Globe Finlay - 393
Gofen & Glossberg - 501
Goldman, Sachs - 172
Goodgal, J.C. - 987
Goodwin Cap - 1,022
Gradison Invst - 677
Graistone Realty - 957
Granahan Invst - 850
Grantham, Mayo - 77
Graybill, R.W. - 869
Great-West Life - 72
Greene, David J. - 318
Greenleaf Cap - 519
Greenville Cap - 1,023
Greenwood Cap - 658
Growth Stock - 511
Grubb & Ellis - 619
G.T. Cap - 490
Guaranty Trust/Mo - 870
Guild Invst - 867
Gulf Invst - 541

H

Haave, Ronald B. - 847
Hagler, Mastrovita - 258
Hahn Holland - 441
Hallmark Cap - 589
Hambrecht & Quist - 868
Hamilton, Allen - 366
Hamilton Invst - 696
John Hancock Fin - 22
Hanson Invst - 372
Harbor Cap - 345
Harris Assoc - 245
Harris Bretall - 502
Harris Derivative - 534
Harris Invst - 59
Hartford Life - 115
Haven Cap - 552
Hawaiian Trust - 268
Hayden, Tolzmann - 926
HD Int'l - 523
Heartland Cap - 512
Heber, Fuger - 659
Heitwell Hollander - 859
Heitman Advisory - 91
Hellman, Jordan - 330
Henderson - 1,024
Heritage - 819
Hewitt Cap - 1,005
HGK Asset - 386
Hibernia Nat'l - 206
Hill Samuel - 343
Hodges Cap - 906
Hoisington Invst - 322
Home Cap - 791
Home Life - 207
Horsley Keogh - 463
Hotchkis and Wiley - 141
Hourglass Cap - 1,025
HT Investors - 475
Hummer, Wayne - 918
Huntington Trust - 424
Hutson Mgmt - 623
Hyperion Cap - 760

I

IAA Trust - 635
IBJ Schroder - 697
ICM Asset - 804
IDC Port - 775
IDS Equity - 120
IDS Fin - 970
IDS Growth - 683
IDS Int'l - 429
IDS Trust - 200
IFP - 902
Income Res. & Mgmt - 612
Independence Invst - 134
Indiana Invst - 220
Inskeep, Wm. A. - 953
Inst'l Cap - 289
Inst'l Mort - 1,026
Inst'l Port - 761
INTECH - 274
Integra Fin - 313
Interfid Cap - 816
Interinvest - 839
Interstate Asset - 942
Inverness Counsel - 546
INVESCO - 37
INVESCO MIM Int'l - 544
Invst. Advisers - 71
Invst. Advisors - 416
Invst. Counsel - 536
Invst. Counselors - 725
Invst. Counsel Md - 179
Invst. Mgmt - 977
Invst. Mgmt. Serv - 594
Invst. Res - 433
Investors Mgmt - 733
Investors Res. Calif - 958
Investors Res. III - 297
Ivory & Sime Int'l - 706

J

Jacobs Levy - 883
Jacques & Kurdziel - 1,027
James Invst - 451

Continued on page 9

Denver Investment Advisors, Inc.

633 Seventeenth Street; Suite 1800
Post Office Box 17487
Denver, Colorado 80217

Dennis E. Larkin
Vice President
(303) 293-5588

Equity ■ Balanced ■ Fixed Portfolios

A

Abbott Capital Management

75 Second Ave., Suite 408, Needham, Mass. 02194; (617) 449-1171

Total assets managed	$820,000,000
Total discretionary assets	$465,000,000
Discretionary tax-exempt	$460,000,000
Types of accounts managed	CEG
Tax-exempt clients	10
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	3

Abbott Capital Management is a domestic and international venture capital, buy-out and special situation partnerships manager.

The firm uses in-depth analyses of the management teams to manage a 10- to 12-year venture capital partnership.

Raymond L. Held is chief investment officer; Stanley E. Pratt is client contact.

Abel/Noser Corp.

90 Broad St., 23rd Floor, New York, N.Y. 10004; (212) 344-2610

Total assets managed	$145,000,000
Discretionary tax-exempt	$145,000,000
Types of accounts managed	CU
Tax-exempt clients	4
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	6

Abel Noser Corp., an active equity manager, uses a quantitative approach emphasizing low p/e ratios. It invests in undervalued stocks with high earnings potential and recently reported earnings surprises, using a ranking system with manual override when significant adverse information is published.

Eugene A. Noser Jr. is chief investment officer; Richard T. McSherry is client contact.

ACA Capital Management

300 S. Grand Ave., Suite 2200, Los Angeles, Calif. 90071; (213) 229-1750

See entry for SECURITY PACIFIC INVESTMENT GROUP.

Acadian Asset Management

260 Franklin St., Boston, Mass. 02110; (617) 439-6141

Total assets managed	$868,000,000
Total discretionary assets	$868,000,000
Discretionary tax-exempt	$838,000,000
International equity assets	$801,000,000
International cash assets	$37,000,000
Types of accounts managed	CEFG
Tax-exempt clients	26
Minimum separate account	$25,000,000
No. of portfolio managers	4
Size of research staff	3

Acadian Asset Management Inc., an active global equity manager, employs a disciplined, quantitative approach, systematically exploiting value characteristics and other pricing anomalies, at both the country and individual stock levels.

Gary L. Bergstrom is chief investment officer; Churchill G. Franklin is client contact.

Acorn Asset Management

200 N. Woodward Ave., Bloomfield Hills, Mich. 48013; (313) 540-4410

Total assets managed	$1,097,000,000
Total discretionary assets	$1,052,000,000
Total discretionary tax-exempt	$950,000,000
401(k)/457 assets managed	$10,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	228
Minimum separate account	$250,000
No. of portfolio managers	8
Size of research staff	2

Acorn Asset Management is an active equity, active fixed-income, balanced, option overwriting and short-term manager.

Its equity approach is value-oriented, measuring the surplus cash flow of 1,100 companies vs. market value to identify undervalued stocks.

Its primary fixed-income approach emphasizes interest rate anticipation and security selection, combining the stability of intermediate-term Treasuries with the appreciation potential of selected sinking fund and convertible bonds.

Robert L. Renck Jr. is chief investment officer; William O. Melvin Jr. is client contact.

Acquest Capital Management Inc.

300 E. Long Lake, Suite 355, Bloomfield Hills, Mich. 48013; (313) 645-5130

Total assets managed	$172,000,000
Discretionary tax-exempt	$0
Minimum separate account	$2,000,000
No. of portfolio managers	4
Size of research staff	5

Acquest Capital Management Inc. is a real estate manager emphasizing product knowledge, market research, sophisticated financial analysis, development skills, management control and integrity.

David G. Ong is chief investment officer; Delores Hoenes is client contact.

Addison Capital Management

1608 Walnut St., 13th Floor, Philadelphia, Pa. 19103; (215) 735-2121

Total assets managed	$212,000,000
Total discretionary assets	$98,000,000
Discretionary tax-exempt	$43,000,000
Types of accounts managed	CGU
Tax-exempt clients	6
Minimum separate account	$5,000,000
No. of portfolio managers	3

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: Government
U: Union

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333 SOUTH HOPE STREET
SUITE 4050
LOS ANGELES, CALIFORNIA 90071

Addison Capital Management is an active equity and balanced manager.

The firm's value-oriented, diversified equity approach favors stocks showing strong price and earnings momentum. In fixed income, the firm uses a high-quality, laddered maturity approach.

Jay R. Massey is chief investment officer; Radcliffe Cheston is client contact.

Advanced Investment Management

2 Oliver Plaza, Suite 2020, Pittsburgh,
Pa. 15222; (412) 762-2415

Total assets managed	$960,000,000
Total discretionary assets	$960,000,000
Discretionary tax-exempt	$960,000,000
Equity indexed assets	$360,000,000
Fixed-income indexed assets	$25,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	31
Minimum separate account	$1,000,000
No. of portfolio managers	5

Advanced Investment Management is an active and passive equity, passive fixed-income and hedging manager.

Its active equity approach is quantitative, emphasizing momentum. Its fixed-income approach strives to replicate the Shearson Lehman Hutton Government/Corporate Bond Index.

J. Thomas Allen is chief investment officer. David A. Mathews is client contact.

Advanced Quantitative Strategies Inc.

1180 W. Swedesford Road, Suite 380,
Berwyn, Pa. 19312; (215) 889-3103

Total assets managed	$5,000,000
Total discretionary assets	$5,000,000
Discretionary tax-exempt	$5,000,000
Types of accounts managed	C
Tax-exempt clients	2
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	2

Advanced Quantitative Strategies Inc. is an active equity manager.

The firm employs a quantitative system to select neglected stocks. The strategy combines value, earnings momentum and balance sheet quality in a multifactor model.

Alexander Parkhurst is chief investment officer; Edward F. Bowman is client contact.

Aegis Capital Management

40 Wall St., New York, N.Y. 10005;
(212) 363-8200

Total assets managed	$24,000,000
Total discretionary assets	$24,000,000
Discretionary tax-exempt	$7,000,000
Types of accounts managed	C
Tax-exempt clients	2
Minimum separate account	$100,000
No. of portfolio managers	1

Aegis Capital Management Corp. is an active fixed-income and futures and options manager.

Its fixed-income approach combines dynamic yield enhancement and risk-controlled arbitrage. Options, stock index and fixed-income futures are used to protect principal, create liquidity and enhance yields for U.S. Treasury portfolios.

Jonathan B. Greenspan is chief investment officer; Thomas P. Zucosky, president, is client contact.

Aegon USA Investment Management Inc.

4333 Edgewood Road N.E., Cedar
Rapids, Iowa 52499; (319) 398-8985

Total assets managed	$6,000,000,000
Total discretionary assets	$350,000,000
Discretionary tax-exempt	$40,000,000
Types of accounts managed	CF
Tax-exempt clients	20
Minimum separate account	$1,000,000
No. of portfolio managers	11
Size of research staff	8

Aegon USA Investment Management Inc., formerly MidAmerica Management Corp., is an active and passive equity, active and passive fixed-income, balanced and tactical asset allocation manager.

Its equity approach is top-down, emphasizing asset allocation of defined assets and the macroeconomic outlook in determining fundamental investment values. It uses interest rate anticipation in fixed income. Options are used.

Patrick E. Falconio is chief investment officer; Drew E. Washburn is client contact.

Aetna Capital Management

145 King St. W., 14th Floor, Toronto,
Ontario M5H 3T7; (416) 864-3880

Total assets managed	$1,860,000,000
Total discretionary assets	$1,328,000,000
Discretionary tax-exempt	$420,000,000
For subsidiaries of U.S. firms	$18,000,000
Equity real estate assets	$60,000,000
Mortgage assets	$91,000,000
Non-North American bonds	$7,000,000
Tax-exempt clients	38
U.S. subsidiaries	2
Types of accounts managed	CGU
Minimum separate account	$4,000,000
No. of portfolio managers	4
Size of research staff	1

Aetna Capital Management Ltd., a Canadian firm, is an active equity, active fixed-income, balanced, real estate, active international equity and short-term manager.

Its equity approach emphasizes individual stock selection based on fundamental value considerations. About 20% to 25% of the decision is based on the economic and market environment.

Its fixed-income approach is to select the proper sector structure and term exposure within acceptable risk/reward limitations.

For real estate, it offers closed-end funds for direct ownership of up to 75% of a property.

Peter Stuart is chief investment officer; David Wright is client contact.

Aetna Life Insurance Co.

151 Farmington Ave., Hartford, Conn.
06156; (203) 273-0123

Total assets managed	$87,099,000,000
Total discretionary assets	$77,737,000,000
Discretionary tax-exempt	$44,985,000,000
Pooled accounts	$6,636,000,000
Separate accounts	$2,975,000,000
GICs	$13,207,000,000
Annuities	$8,611,000,000
Other	$13,556,000,000
401(k)/457 assets managed	$7,989,000,000
Equity real estate assets	$4,519,000,000
Mortgage assets	$16,877,000,000
International equity assets	$297,000,000
Equity indexed assets	$528,000,000

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- EQUITABLE REAL ESTATE INVESTMENT MANAGEMENT
- BARING INSTITUTIONAL REALITY ADVISORS
- THE NATIONAL BANK OF WASHINGTON
- DAI-ICHI SEIMEI CORPORATION
- CALIFORNIA PUBLIC EMPLOYEES RETIREMENT SYSTEM
- HSG/ASSET MANAGEMENT GROUP

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Contact: John R. Serhant, Managing Director
100 Maiden Lane, New York, NY 10038
(212) 363 7450 FAX (212) 558 6762

Fixed-income indexed assets	$297,000,000
Dedicated/immunized assets	$63,000,000
Tax-exempt clients	
Pooled	1,475
Separate	49
Types of accounts managed	CEFGU
Minimum separate equity account	$5,000,000
Minimum separate bond account	$25,000,000
No. of portfolio managers	18
Size of research staff	24

Aetna Life Insurance Co. is an active and passive equity, active and passive fixed-income, balanced, tactical asset allocation, real estate, active international/global equity and fixed-income, short-term and GIC manager.

Its active equity investment approach is to identify securities with improving earnings and growth expectations and to purchase them at favorable relative valuation levels.

Its active fixed-income approach uses sector rotation and individual securities selection to control market risk and maximize total returns.

Its real estate activities include direct ownership and joint venture structures as well as both participating and fixed-rate mortgages involving all major types of income-producing properties.

Philip R. Roberts is chief investment officer; John E. Arant is client contact.

The data above include the assets of the following subsidiary:

- Aetna Capital Management International Ltd., with $297 million in tax-exempt assets, uses centralized asset and country allocation with regional sector and stock selection to add value. Country and stock selection are based on economic, fundamental value and technical analysis with a view toward identifying markets and stocks with high but undervalued expected returns.

Mr. Roberts is chief investment officer; Thomas Scanlon is client contact.

AFA Financial Inc.

1422 Euclid Ave., Cleveland, Ohio
44115; (216) 861-1050

Total assets managed	$188,000,000
Total discretionary assets	$188,000,000
Discretionary tax-exempt	$159,000,000
Types of accounts managed	CFGU
Tax-exempt clients	129
Minimum separate account	$100,000
No. of portfolio managers	3
Size of research staff	1

AFA Financial Inc. is an active equity and balanced manager.

The firm focuses on the dividend yield as the primary criterion for buying and selling stocks, believing that preserving capital in down markets is as critical as enhancing capital in up markets. The philosophy is sustained through the purchase of quality securities that represent value and the diversification of each portfolio.

James A. Hammett is client contact.

AFL-CIO Housing & Building Investment Trusts

1717 K St. N.W., Suite 707,
Washington, D.C. 20006; (202)
331-8055

Total assets managed	$287,000,000
Total discretionary assets	$287,000,000
Discretionary tax-exempt	$287,000,000
Mortgage assets	$258,000,000
Types of accounts managed	U
Tax-exempt clients	223

AFL-CIO Housing & Building Investment Trusts is a passive fixed-income, short-term and balanced real estate manager.

It provides current income and long-term appreciation through investments in construction loans, mortgages, mortgage-backed securities, participating mortgages and equity interests in fully diversified portfolios of residential, commercial and industrial real estate projects.

William C. Tutt is chief investment officer; Mike Arnold is client contact.

AIG Global Investors Inc.

1 World Financial Center, New York,
N.Y. 10281; (212) 266-0400

Total assets managed	$12,000,000,000
Total discretionary assets	$375,000,000
Discretionary tax-exempt	$70,000,000
International equity assets	$70,000,000
Types of accounts managed	C
Tax-exempt clients	1
Minimum separate account	$10,000,000
No. of portfolio managers	8

AIG Global Investors Inc. is an active international/global equity and fixed-income manager.

Its equity approach is top-down/bottom-up, with an emphasis on growth stocks. Its fixed-income approach uses interest rate anticipation and currency movement forecasts. Options and fixed-income futures are used.

Richard Goodwyn is chief investment officer; Ronald J. Davi is client contact.

AIM Management Group Inc.

11 Greenway Plaza, Suite 1919,
Houston, Texas 77046; (713)
626-1919, (800) 347-1919

Total assets managed	$13,342,000,000
Total discretionary assets	$13,342,000,000
Discretionary tax-exempt	$110,000,000
401(k)/457 assets managed	$83,000,000
Types of accounts managed	CEF
Tax-exempt clients	4
Minimum separate account	$10,000,000
No. of portfolio managers	7
Size of research staff	8

AIM Management Group Inc. is an active equity, active and passive fixed-income, balanced, convertible and mutual fund manager.

The tax-exempt assets listed above reflect fixed-income assets managed by AIM Capital Management.

Its equity approach uses growth and emerging growth stocks that are monitored on the basis of earnings momentum and relative strength in the marketplace.

In fixed-income, the firm creates overdiversified portfolios loaded with lower-quality issues to capitalize on yield premiums and buys convertibles, seeking a high level of current income exceeding yields in the equity market.

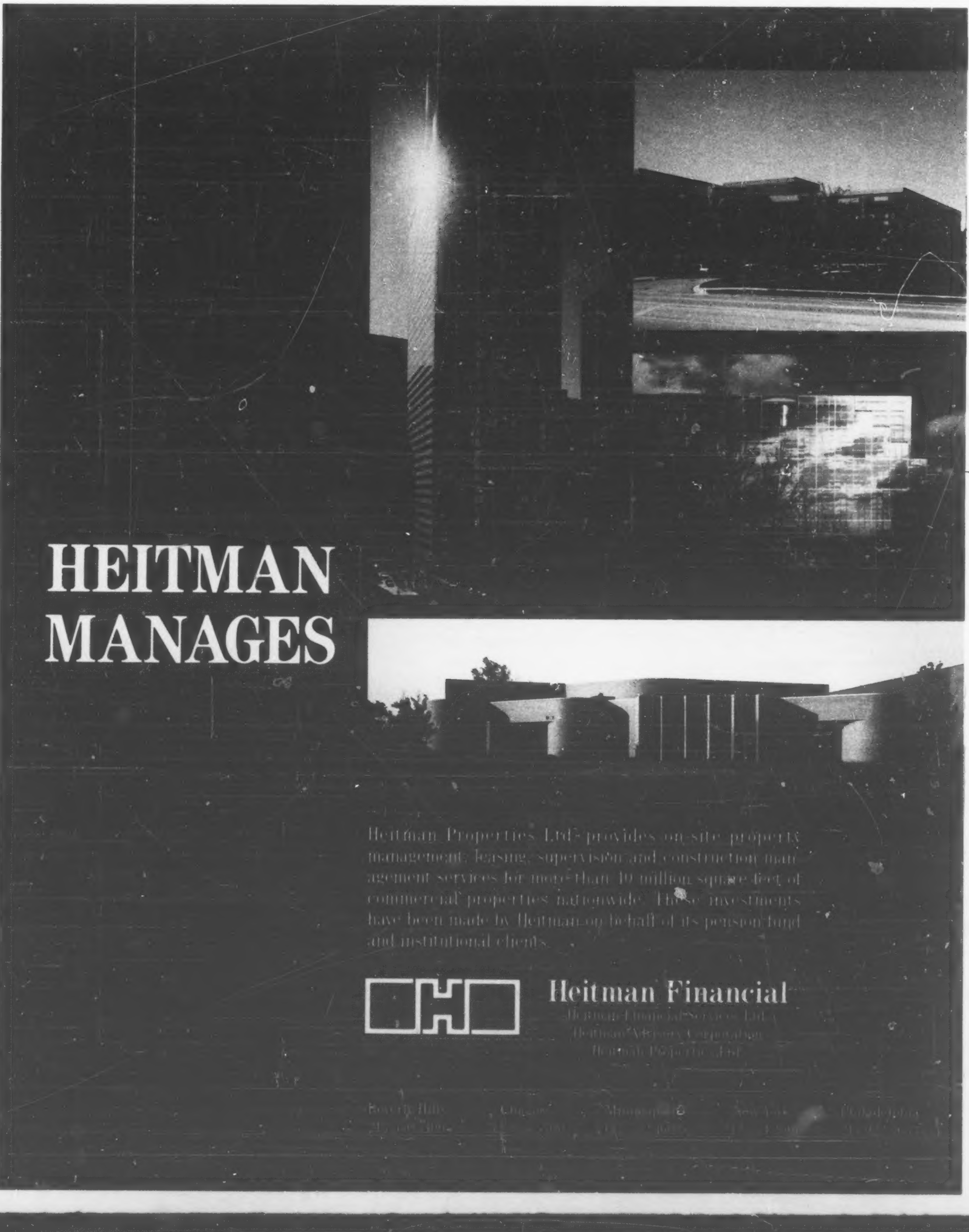
Michael Licopantis is chief investment officer; Gary T. Crum is client contact.

Albion Management Group

P.O. Box 8080, Alta, Utah 84092;
(801) 742-3500

Total assets managed	$48,000,000
Total discretionary assets	$48,000,000
Discretionary tax-exempt	$5,000,000
401(k)/457 assets managed	$2,000,000
Types of accounts managed	C
Minimum separate account	$250,000
No. of portfolio managers	2

Albion Management Group is an active equity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active fixed-income and balanced manager.

In equities, it emphasizes growth, emerging growth and low p/e stocks. It seeks overlooked values, especially companies with a market niche, growth and earnings potential, hidden assets and other special situations.

Its fixed-income approach relies on interest rate anticipation.

Wm. Toby Levitt is chief investment officer; Heidi Mosburg is client contact.

Aldrich, Eastman & Waltch

265 Franklin St., Boston, Mass. 02110;
(617) 439-9000

Total assets managed	$4,300,000,000
Total discretionary assets	$4,300,000,000
Discretionary tax-exempt	$4,100,000,000
Equity real estate assets	$900,000,000
Mortgage assets	$3,200,000,000
Types of accounts managed	CEGU
Tax-exempt clients	57
Minimum separate account	$100,000,000

Aldrich, Eastman & Waltch Inc. is a real estate manager.

Its investment approach is flexible and opportunistic, reflecting property fundamentals and current market conditions. It emphasizes adding value through active management of both the property and the capital structure of the investment.

The fixed-rate real estate mortgage investment program seeks spreads of between 150 and 200 basis points over comparable Treasuries, and may involve creative investment structures and unusual property types.

Thomas G. Eastman is chief investment officer; Robert J. Hannan is client contact.

Fred Alger Management Inc.

75 Maiden Lane, New York, N.Y.
10038; (212) 806-8800

Total assets managed	$1,429,000,000
Total discretionary assets	$1,429,000,000
Discretionary tax-exempt	$1,159,000,000
Dedicated/immunized assets	$2,000,000
Types of accounts managed	CFGU
Tax-exempt clients	27
Minimum separate account	$300,000
Size of research staff	19

Fred Alger Management Inc. is an active equity and fixed-income, balanced, short-term, immunized fixed-income and convertible securities manager.

The firm's bottom-up, growth-stock approach relies on in-depth fundamental research. The focus is on companies experiencing high unit volume growth or positive life cycle changes that will lead to above-average earnings growth.

Its fixed-income approach is based on interest rate anticipation, sector analysis and credit research, seeking to achieve consistent, above-average returns through active maturity and sector selection.

Fred M. Alger III is chief investment officer and client contact.

Allbritton Capital Management Associates

One Galleria Tower, 13355 Noel
Road, Suite 1345, LB71, Dallas,
Texas 75240; (214) 392-7288

Total assets managed	$100,000,000
Total discretionary assets	$100,000,000
Discretionary tax-exempt	$97,000,000
International fixed-income assets	$6,000,000
International cash assets	$14,000,000
Types of accounts managed	CEF
Tax-exempt clients	3
Minimum separate account	$5,000,000
No. of portfolio managers	2

Allbritton Capital Management Associates Inc. is an active equity, active domestic and international fixed-income, balanced and domestic and international short-term manager.

Its equity approach is quantitative and value-oriented, using time-proven, fundamental analysis. In fixed income, it uses maturity and duration analysis.

Edwin A. Allbritton is chief investment officer; Clark P. Manning is client contact.

Allegiance Capital Inc.

7777 Center Ave., Huntington Beach,
Calif. 92647;(714) 898-0134

Total assets managed	$90,000,000
Total discretionary assets	$90,000,000
Discretionary tax-exempt	$5,000,000
Types of accounts managed	C
Tax-exempt clients	1
Minimum separate account	$5,000,000
No. of portfolio managers	2

Allegiance Capital Inc., an active fixed-income manager, manages high-grade and mortgage-only portfolios, taking minimal duration risk, adding value by altering portfolio maturities and actively rotating sectors across the entire high-quality and mortgage universe. Fixed-income futures are used.

William Mawhorter is chief investment officer; Robert Southard is client contact.

Alliance Capital Management L.P.

1345 Sixth Ave., New York, N.Y.
10105; (212) 969-1046

Total assets managed	$43,782,000,000
Total discretionary assets	$41,669,000,000
Discretionary tax-exempt	$29,190,000,000
Mortgage assets	$3,213,000,000
International equity assets	$372,000,000
International fixed-income assets	$30,000,000
Equity indexed assets	$7,048,000,000
Fixed-income indexed assets	$21,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	330
Minimum separate account	$10,000,000
No. of portfolio managers	47
Size of research staff	23

Alliance Capital Management L.P. offers active and passive equity and fixed-income management both domestically and internationally, as well as balanced, tactical asset allocation/short-term, venture capital and convertible securities management.

Its growth stock approach seeks to invest in two- to three-year relative earnings strength at an early stage and at a reasonable price. The firm provides disciplined equity products and a full range of domestic and international products.

In fixed income, the firm manages market risk by limiting duration deviations from market. Value is added through heavy sector concentrations and opportunity trading.

Carol Zipkin is client contact.

Allstate Life Insurance Co.

Allstate Plaza West, Northbrook, Ill.
60062; (708) 402-2568

Total assets managed	$10,995,000,000
Total discretionary assets	$3,087,000,000
Discretionary tax-exempt	$3,087,000,000
GICs	$2,084,000,000
Annuities	$1,003,000,000
401(k)/457 assets managed	$971,000,000
Types of accounts managed	C
No. of portfolio managers	5
Size of research staff	25

Allstate Life Insurance Co. is a guaranteed investment contract manager.

Louis G Lower is chief investment officer; Thomas K. Heau is client contact.

Alpine Capital Management

650 S. Cherry St., Suite 700, Denver,
Colo. 80222; (800) 826-6677

Total assets managed	$205,000,000
Total discretionary assets	$205,000,000
Discretionary tax-exempt	$150,000,000
401(k)/457 assets managed	$3,000,000
Types of accounts managed	CEF
Tax-exempt clients	235
Minimum separate account	$250,000
No. of portfolio managers	5
Size of research staff	2

Alpine Capital Management is an active equity, balanced and tactical asset allocation manager.

Its equity approach relies on sector rotation, concentrating on asset allocation and industrial selection. Its fixed-income approach is based on interest rate anticipation, investing in Treasuries and high-quality, investment-grade corporate bonds.

John Dickerson is chief investment officer; Andre Ratkai is client contact.

Am Cal Advisors Inc.

4730 Woodman Ave., Suite 220,
Sherman Oaks, Calif. 91423; (818)
990-3250

Total assets managed	$93,000,000
Total discretionary assets	$77,000,000
Discretionary tax-exempt	$77,000,000
Equity real estate assets	$38,000,000
Mortgage assets	$39,000,000
Types of accounts managed	GU
Tax-exempt clients	6
Minimum separate account	$10,000,000
No. of portfolio managers	3
Size of research staff	3

Am Cal Advisors Inc. is a real estate manager.

Its investment approach emphasizes cash-on-cash return to exceed 12-year Treasuries and 150 basis points with preservation of capital through appreciation in value to exceed the inflation rate by 3%.

James B. McKenna is chief investment officer; Robert Samuel is client contact.

Amalgamated Bank of New York

11-15 Union Square, New York, N.Y.
10003; (212) 255-6200

Total assets managed	$1,500,000,000
Discretionary tax-exempt	$1,500,000,000
Separate accounts	$1,500,000,000
Tax-exempt clients	129
Types of accounts managed	U
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	4

Amalgamated Bank of New York is an active short/intermediate fixed-income manager, emphasizing interest rate anticipation.

It seeks to generate attractive current income, avoid losses and conserve principal during troubled markets.

Richard Cohen is chief investment officer and client contact.

Amalgamated Trust and Savings Bank

1 W. Monroe St., Chicago, Ill. 60603;
(312) 822-3289

Total assets managed	$265,000,000
Total discretionary assets	$265,000,000
Discretionary tax-exempt	$265,000,000
Separate accounts	$265,000,000
Tax-exempt clients	50
Types of accounts managed	GU
No. of portfolio managers	2

Amalgamated Trust and Savings Bank is an active equity, active fixed-income, balanced and short-term manager.

For equities, the bank uses sector rotation and market timing, emphasizing value selection and a market-driven sell discipline. Its fixed-income approach uses interest rate anticipation. Quality, current income and maturity balance are emphasized.

Michael M. Karnes is chief investment officer and client contact.

AMB Institutional Realty Advisors

505 Montgomery St., San Francisco,
Calif. 94111; (415) 394-9000

Total assets managed	$764,000,000
Total discretionary assets	$81,000,000
Discretionary tax-exempt	$81,000,000
Equity real estate assets	$55,000,000
Mortgage assets	$26,000,000
Types of accounts managed	CEF
Tax-exempt clients	9
Minimum separate account	$25,000,000
No. of portfolio managers	2
Size of research staff	1

AMB Institutional Realty Advisors, a real estate manager, acquires equity interests in substantially leased, midsize, newer properties in supply constrained submarkets with yields 150 to 300 basis points above large properties of comparable quality. Value is added through direct asset management.

Hamid Moghadam is chief investment officer; T. Robert Burke is client contact.

Ambs Investment Counsel

1501 McKay Tower, Grand Rapids,
Mich. 49503; (616) 454-4535

Total assets managed	$204,000,000
Total discretionary assets	$176,000,000
Discretionary tax-exempt	$125,000,000
International equity assets	$5,000,000
Types of accounts managed	CEF
Tax-exempt clients	57
Minimum separate account	$400,000
No. of portfolio managers	3

Ambs Investment Counsel Inc. is an active equity, active fixed-income and balanced manager.

The firm's equity approach emphasizes growth and low p/e stocks. The fixed-income approach focuses on quality issues with maturities offering the most attractive risk/return over the near term.

Keith L. Ambs is chief investment officer and client contact.

American Capital Management Inc.

90 Broad St., New York, N.Y. 10004;
(212) 344-3300

Total assets managed	$51,000,000
Total discretionary assets	$51,000,000
Discretionary tax-exempt	$0
Minimum separate account	$250,000
No. of portfolio managers	2

American Capital Management Inc. is an active equity and balanced manager.

It equity approach emphasizes investments in smaller growth companies with accelerating earnings momentum that appear undervalued and average $130 million in revenue. It looks for growth, profitability and financial strength.

Its fixed-income approach uses interest rate anticipation; investments are tailored to secular movements of inflation and lending rates with emphasis on short or long term.

Luke P. LaValle Jr. is chief investment officer and client contact.

American Agricultural Investment Management

631 E. Butterfield, Suite 302, Lombard,
Ill. 60148; (708) 810-0040

Total assets managed	$22,000,000
Total discretionary assets	$13,000,000
Discretionary tax-exempt	$13,000,000
Equity real estate assets	$13,000,000
Types of accounts managed	CU
Tax-exempt clients	2
Minimum separate account	$10,000,000
No. of portfolio managers	3
Size of research staff	2

American Agricultural Investment Management Co. Inc., a farmland equity manager, selects prime income-producing farmland, diversified geographically and by commodity, in five selected agricultural areas.

H. Joseph Boum is chief investment officer; Paula Marie Tomsky is client contact.

American Asset Management

200 Public Square, 26th Floor, Suite
3500, Cleveland, Ohio 44114; (216)
781-8899

Total assets managed	$620,000,000
Total discretionary assets	$560,000,000
Discretionary tax-exempt	$266,000,000
Types of accounts managed	CEF
Tax-exempt clients	60
Minimum separate account	$1,000,000
No. of portfolio managers	5

American Asset Management is an active equity, active fixed-income and balanced manager.

Its conservative equity approach emphasizes high-quality securities, selective diversification, low p/es, above-average yields, earnings visibility and high asset values. Its fixed-income approach is based on interest rate anticipation and uses securities with maturities of less than 10 years.

Joseph H. Thomas and James DiFiore are chief investment officers; Mr. Thomas is client contact.

25 largest independent managers

Firm	$ mils.*
G.E. Investment	27,370
Miller, Anderson & Sherrerd	21,397
Fidelity Investments	19,112
Delaware Investment	15,941
Boston Co.	15,328
Sanford C. Bernstein	14,555
RCM Capital	14,465
Lehman Ark	13,904
Morgan Stanley Asset	13,630
Lincoln Capital	13,456
Brinson Partners	13,411
Oppenheimer Capital	13,250
Fayez Sarofim	13,105
Merrill Lynch Asset	12,950
INVESCO Capital	12,900
Lazard Freres	12,623
Wellington	10,974
Scudder, Stevens & Clark	10,718
Fischer, Francis, Trees	10,000
Capital Research & Mgmt.	9,800
T. Rowe Price Associates	9,395
Duff & Phelps	8,971
Mitchell Hutchins	8,908
BEA Associates	8,877
JMB Institutional	8,639
Total	**333,679**

*Discretionary, tax-exempt assets

American Capital Management Inc.

90 Broad St., New York, N.Y. 10004;
(212) 344-3300

Total assets managed	$51,000,000
Total discretionary assets	$51,000,000
Discretionary tax-exempt	$0
Minimum separate account	$250,000
No. of portfolio managers	2

American Capital Management Inc. is an active equity and balanced manager.

It equity approach emphasizes investments in smaller growth companies with accelerating earnings momentum that appear undervalued and average $130 million in revenue. It looks for growth, profitability and financial strength.

Its fixed-income approach uses interest rate anticipation; investments are tailored to secular movements of inflation and lending rates with emphasis on short or long term.

Luke P. LaValle Jr. is chief investment officer and client contact.

American Capital Management & Research

2800 Post Oak Blvd., Houston, Texas
77056; (713) 993-0500

Total assets managed	$13,398,000,000
Total discretionary assets	$12,958,000,000
Discretionary tax-exempt	$3,785,000,000
401(k)/457 assets managed	$17,000,000
Types of accounts managed	CEFG
No. of portfolio managers	16
Size of research staff	11

American Capital Management & Research Inc. is an active equity, active fixed-income, tactical asset allocation and short-term manager.

Its equity approach seeks to generate consistently above-average performance through the integration of quantitative investment techniques with traditional forms of investment management.

Its fixed-income department manages government, mortgage, corporate and high-yield investment portfolios, to provide an attractive blend of high current return and above-average total return.

Robert C. Peck Jr. and Alan T. Sauhtleben are chief investment officers; Janet M. Young is client contact.

American Fund Advisors

50 Broad St., New York, N.Y. 10004;
(212) 482-8100

Total assets managed	$165,000,000
Total discretionary assets	$165,000,000
Discretionary tax-exempt	$26,000,000
Types of accounts managed	C
Tax-exempt clients	13
Minimum separate account	$350,000
No. of portfolio managers	3

American Fund Advisors is an active equity, balanced and technology manager.

Its primary equity approach emphasizes emerging growth stocks analyzed through Graham & Dodd principles. It has a value orientation, emphasizing technology and aviation. The focus is on cash flow and margin normalization. Its fixed-income approach is passive.

Barry J. Gordon is chief investment officer; Marc H. Klee is client contact.

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: Government
U: Union

American Income Plus Inc.

1111 Park Plaza, Suite 810,
Cleveland, Ohio 44114; (216)
241-6010

Total assets managed	$75,000,000
Total discretionary assets	$75,000,000
Discretionary tax-exempt	$67,000,000
401(k)/457 assets managed	$5,000,000
Types of accounts managed	CFU
Tax-exempt clients	67
Minimum separate account	$1,000,000
No. of portfolio managers	7

American Income Plus Inc. is an active equity and balanced manager.

The firm buys large-cap stocks that have uninterrupted dividend histories of 10 years, less than 50% long-term debt, and are at the higher end of their historical yield cycle. In balanced accounts, its fixed-income approach uses a pooled GIC fund.

Robert C. Smith is chief investment officer; Stephen A. Malbasa is client contact.

American National Bank & Trust Co.

736 Market St., Chattanooga, Tenn.
37402; (615) 757-3722

Total assets managed	$1,287,000,000
Total discretionary assets	$1,287,000,000
Discretionary tax-exempt	$495,000,000
Pooled accounts	$100,000,000
Separate accounts	$395,000,000
401(k)/457 assets managed	$30,000,000
Tax-exempt clients:	
Commingled	185
Separate	135
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	8
Size of research staff	2

American National Bank & Trust Co. is an active equity, active fixed-income, balanced and short-term manager.

Its growth-oriented, large-cap equity approach uses sector rotation and emphasizes stocks with above-average historical growth and strong fundamentals that are selling at low relative multiples. Its fixed-income approach involves the full range of maturities; holdings are shifted based on interest rate anticipation, credit/sector swaps and yield curve analysis.

Andrew J. Muldoon III is chief investment officer; James A. Woods is client contact.

American National Bank & Trust

101 E. Fifth Street, St. Paul, Minn.
55101-9976; (612) 298-6004

Total assets managed	$1,236,000,000
Total discretionary assets	$237,000,000
Discretionary tax-exempt	$175,000,000
Pooled accounts	$125,000,000
Separate accounts	$50,000,000
401(k)/457 assets managed	$60,000,000
Tax-exempt clients:	
Separate	11
Commingled	275
Types of accounts managed	CEFU
Minimum separate account	$150,000
No. of portfolio managers	2

American National Bank & Trust is an active equity, active and passive fixed-income and balanced manager.

Its equity approach is a value, low p/e, high dividend style that is somewhat contrarian and uses disciplined computer-based management. Trinity Investment Management assists in equity management.

Its primary fixed-income approach uses interest rate anticipation and actively manages durations between one and 10 years.

John P. Klett is chief investment officer; Jerry Yugend is client contact.

Amerindo Investment Advisors Inc.

388 Market St., Suite 950, San
Francisco, Calif. 94111; (415)
362-0184

Total assets managed	$388,000,000
Total discretionary assets	$388,000,000
Discretionary tax-exempt	$191,000,000
Types of accounts managed	CEFG
Tax-exempt clients	11
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	6

Amerindo Investment Advisors Inc., an active equity manager, emphasizes emerging growth stocks and invests in companies involved in the applied sciences and technologies.

Alberto W. Vilar is chief investment officer; James C. Vogelzang, (303) 629-1900, is client contact.

Ameritas Investment Advisors Inc.

P.O. Box 81889, Lincoln, Neb. 68501;
(402) 467-6980

Total assets managed	$1,119,000,000
Total discretionary assets	$1,119,000,000

Discretionary tax-exempt	$440,000,000
Pooled accounts	$6,000,000
GICs	$38,000,000
Annuities	$2,000,000
Other	$394,000,000
401(k)/457 assets managed	$16,000,000
Equity real estate assets	$25,000,000
Mortgage assets	$79,000,000
Tax-exempt clients	
Pooled	16
Types of accounts managed	CGU
Minimum separate account	$500,000
No. of portfolio managers	5
Size of research staff	3

Ameritas Investment Advisors Inc. is an active equity and fixed-income, balanced and real estate manager.

Its equity approach emphasizes large-capitalization and high-quality stocks, with diversification by both industry sector and number of issues. Its fixed-income approach involves managing investment-grade securities with maturities of less than 15 years. It specializes in private placements and commercial mortgages.

In real estate, the firm does joint ventures in regional markets with local partners.

Jon C. Headrick is chief investment officer; John F. Leonhardt is client contact.

Ameritrust Co. National Association

900 Euclid Ave., Cleveland, Ohio
44101-0937; (216) 737-4089

Total assets managed	$13,619,000,000
Total discretionary assets	$13,619,000,000
Discretionary tax-exempt	$8,393,000,000
Pooled accounts	$1,334,000,000
Separate accounts	$7,060,000,000
401(k)/457 assets managed	$2,657,000,000
Mortgage assets	$300,000,000
Equity indexed assets	$67,000,000
Tax-exempt clients:	
Commingled	400
Separate	202
Types of accounts managed	CEFGU
Minimum separate account	$3,000,000
No. of portfolio managers	13
Size of research staff	11

Ameritrust Co. National Association is an active and passive equity, active fixed-income, balanced, short-term and convertible manager.

For equities, Ameritrust constructs broadly diversified portfolios consisting of low p/e issues when dividends return and fundamental value will provide superior long-term returns while limiting downside risk. The fixed-income approach, based on interest rate anticipation, stresses quality and a maturity structure so portfolios generally will have low volatility.

Richard C. Hyde is chief investment officer; Gary W. Queen is client contact.

Ameritrust Texas

P.O. Box 2320, Dallas, Texas
75221-2320; (214) 712-3460

Total assets managed	$7,787,000,000
Discretionary tax-exempt	$1,418,000,000
401(k)/457 assets managed	$225,000,000
Equity real estate assets	$28,000,000
International equity assets	$9,000,000
International fixed-income assets	$17,000,000
Types of accounts managed	CFG
Tax-exempt clients	1,450
Minimum separate account	$5,000,000
No. of portfolio managers	13

Ameritrust Texas Corp., formerly MTrust Corp., is an active equity, active fixed-income, balanced, real estate, active international equity and fixed-income, guaranteed contract and short-term manager.

In equities, it uses multiple investment styles, including growth in both large- and small-cap stocks, an international growth fund and a value-oriented fund. Its fixed-income approach is x-structured. Duration of portfolio approximates the benchmark with active management of sector and maturities to generate premium returns.

Its real estate approach concentrates on investment-grade, income-producing properties with significant potential for value enhancement.

Richard Siefert is chief investment officer; Duane Cunningham in Dallas, (214) 712-3519, and Sandra Fuller in Houston, (713) 751-7295, are client contacts.

AMI Asset Management International Inc.

26 Wellington St. E., Suite 900,
Toronto, Ontario M5E 1S2; (416)
865-0731

Total assets managed	$6,336,000,000
Discretionary tax-exempt	$4,814,000,000

AMI Asset Management International Inc., a Canadian firm, through its divisions, subsidiaries and joint ventures, offers equity (Canadian, U.S. and international), fixed-income, balanced, real estate, venture capital and mutual fund management.

Gary Kondrat is chief investment officer; Tania Murenko is client contact.

The following subsidiaries' assets are included in the data above. In addition, two other subsidiaries are profiled separately: Fleming Canada (formerly European and Pacific Investment Management) and Penreal Advisors. The assets of these two firms are not included above.

- Montreal Investment Management manages $1.648 billion in tax-exempt assets. It offers equity, fixed-income and balanced management.

The firm's equity approach uses fundamental analysis with an emphasis on growth and low p/e stocks. Portfolios are highly diversified and value-oriented. Fixed-income portfolios are divided into a value-added core and an interest rate anticipation portion.

Balanced portfolios provide asset diversification by using non-North American, real estate and venture capital vehicles.

Robert Gibson is managing partner; Norman J. Gagnon is client contact.

- Toronto Investment Management manages $2.97 billion in tax-exempt assets in equity, fixed-income and balanced accounts.

The equity approach is the same as Montreal Investment's.

The fixed-income approach is fundamentally oriented to economic and credit market research, and emphasizes interest rate anticipation. Computer analysis and spread trading analysis is used extensively. Value is added through trades on the yield curve.

The managing partner is William J. Smith; Mr. Kondrat is chief investment officer; Ms. Murenko is client contact.

- Vanbrit Investment Management manages $196 million in tax-exempt assets.

The firm offers equity, fixed-income, balanced and money market management.

Its equity and fixed-income approaches are the same as Montreal Investment's.

Larry D. Avant is managing partner and client contact.

- Vengrowth Capital Fund, an AMI joint venture, offers venture capital limited partnerships. It manages $59 million in tax-exempt assets.

The funds invest in the equity of well-managed, small to midsize Canadian and U.S. private companies.

Henry Mortimer is client contact.

Amli Institutional Advisors

125 S. Wacker, Chicago, Ill. 60606
(312) 443-1477

Total assets managed	$136,000,000
Total discretionary assets	$0
Discretionary tax-exempt	$0
Minimum separate account	$25,000,000

Amli Institutional Advisors Inc. is a real estate manager that focuses on acquiring and developing large, strategically located land parcels in Chicago, Atlanta and Dallas for luxury multifamily, industrial or business park uses.

John H. Brandeburg is client contact.

Amoskeag Bank

875 Elm St., Manchester, N.H. 03108;
(603) 647-3600

Total assets managed	$544,000,000
Total discretionary assets	$440,000,000
Discretionary tax-exempt	$150,000,000
Pooled accounts	$7,000,000
Separate accounts	$143,000,000
401(k)/457 assets managed	$5,000,000
Tax-exempt clients:	
Commingled	100
Separate	250
Types of accounts managed	CEF
Minimum separate account	$300,000
No. of portfolio managers	5

Amoskeag Bank is an equity, fixed-income, balanced, tactical asset allocation and short-term manager.

For equities, it is value-oriented, using growth and low p/e stocks with Graham & Dodd analysis. It uses interest rate anticipation for fixed income.

Sarah Q. "Kim" Yoshida is chief investment officer; David McKenzie is client contact.

AMR Investment Services

P.O. Box 610648, Dallas/Ft. Worth
Airport, Texas 75261-0648; (817)
967-3509

Total assets managed	$1,449,000,000
Total discretionary assets	$1,449,000,000
Total discretionary tax-exempt	$411,000,000
401(k)/457 assets managed	$225,000,000
Types of accounts managed	CF
Tax-exempt clients	30
Minimum separate account	$20,000,000
No. of portfolio managers	4
Size of research staff	3

AMR Investment Services Inc. is an active equity, active fixed-income, balanced and short-term manager.

International and real estate management are offered through external managers.

AMR manages $5.585 billion in total assets; of the total, $4.547 billion is tax-exempt, of which $411 million is managed internally and $4.136 billion by external managers.

The firm follows a low p/e, low price-to-book-value approach for equities.

Its fixed-income approach uses sector analysis, stressing income requirements and low volatility.

William F. Quinn and Dennis M. O'Hara are chief investment officers; Richard N. Hoag and Bart Roberson are client contacts.

AmSouth Bank

P.O. Box 11426, Birmingham, Ala.
35202; (205) 326-5512

Total assets managed	$10,395,000,000
Total discretionary assets	$4,493,000,000
Discretionary tax-exempt	$2,051,000,000
Pooled accounts	$374,000,000
Separate accounts	$1,677,000,000
Tax-exempt clients:	
Pooled accounts	800
Separate accounts	230
Types of accounts managed	CEFG
Minimum separate account	$1,000,000
No. of portfolio managers	19

AmSouth Bank is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach concentrates on undervalued, out-of-favor stocks, focusing on low p/e and using Graham & Dodd analysis. The bank seeks to capitalize on cyclical movements in stock prices and target stocks that are mispriced relative to long-term value.

Its primary fixed-income approach uses interest rate anticipation, capitalizing on broad, cyclical movements.

John H. Goff Jr. is chief investment officer; Jo-Ann D. Foster is client contact.

Analytic Investment Management Inc.

2222 Martin St., Suite 230, Irvine,
Calif. 92715; (714) 833-0294

Total assets managed	$1,411,000,000
Total discretionary assets	$1,411,000,000
Discretionary tax-exempt	$1,287,000,000
401(k)/457 assets managed	$1,000,000
Types of accounts managed	CEGU
Tax-exempt clients	25
Minimum separate account	$10,000,000
No. of portfolio managers	8
Size of research staff	3

Analytic Investment Management Inc. is an active equity, active fixed-income and equity overwriting manager.

Its equity approach is based on quantitative techniques, with a well-diversified portfolio that uses a variety of option strategies to enhance return and control risk.

Its fixed-income approach focuses on high-quality securities and related derivative securities. Portfolios are constructed to provide return enhancement to client-specified duration levels.

Alan Lewis is chief investment officer; Kevin T. Hamilton is client contact.

ANB Investment Management Co.

1 N. Lasalle St., Suite 600, Chicago,
Ill. 60690; (312) 661-5866

Total assets managed	$12,130,000,000
Total discretionary assets	$12,130,000,000
Discretionary tax-exempt	$11,529,000,000
Pooled accounts	$8,445,000,000
Separate accounts	$3,084,000,000
401(k)/457 assets managed	$200,000,000
International equity assets	$381,000,000
Equity indexed assets	$7,864,000,000
Fixed-income indexed assets	$1,400,000,000
Tax-exempt clients:	
Separate	30
Commingled	320
Types of accounts managed	CEFGU
No. of portfolio managers	11
Size of research staff	4

ANB Investment Management Co. is an active and passive equity, active and passive fixed-income, passive international equity, balanced, tactical asset allocation and short-term manager.

Its primary equity and fixed-income approaches offer broad diversification through passive management and enhanced index capabilities.

John R. Tilton is chief investment officer; Ken Sobolewski is client contact.

Anchor Capital Advisors Inc.

1 Post Office Square, Boston, Mass.
02109; (617) 423-9336

Total assets managed	$267,000,000
Total discretionary assets	$267,000,000
Discretionary tax-exempt	$174,000,000
Types of accounts managed	CEFU
Tax-exempt clients	87
Minimum separate account	$250,000
No. of portfolio managers	4
Size of research staff	2

Anchor Capital Advisors Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach is creative, flexible and value-oriented, focusing on low p/e stocks. Its fixed-income approach is active, based upon forecasts of interest rates and inflation.

William P. Rice is chief investment officer; Robert F. Croce is client contact.

Anhalt/O'Connell Inc.

345 S. Figueroa St., Suite 303, Los
Angeles, Calif. 90071; (213)
622-0066

Total assets managed	$748,000,000
Total discretionary assets	$748,000,000
Discretionary tax-exempt	$682,000,000
Types of accounts managed	C
Tax-exempt clients	5
Minimum separate account	$5,000,000
No. of portfolio managers	2

Anhalt/O'Connell Inc., an active fixed-income manager, uses fundamental data to identify interest rate trends and appropriate maturities. Put and call options are used as a hedge. It uses Treasury securities exclusively; Treasury bond futures are used.

Michael F. O'Connell is chief investment officer; Ross B. McAdam is client contact.

Aon Advisors Inc.

6604 W. Broad St., Richmond, Va.
23230; (804) 281-6447

Total assets managed	$3,822,000,000
Total discretionary assets	$3,241,000,000
Discretionary tax-exempt	$1,295,000,000
Pooled accounts	$118,000,000
GICs	$991,000,000
Annuities	$71,000,000
Other	$115,000,000
401(k)/457 assets managed	$218,000,000
Equity real estate assets	$2,000,000
Mortgage assets	$275,000,000
Dedicated/immunized assets	$889,000,000
Tax-exempt clients:	
Pooled	10
Types of accounts managed	CGU
No. of portfolio managers	6

Aon Advisors Inc. is an active equity, balanced, short-term and mortgage manager.

Its primary equity approach is quantitative. Its primary fixed-income approach emphasizes anticipating interest rate trends and selecting issues with improving credit characteristics not yet reflected in their current market price. Options are used.

Its real estate approach seeks loans on significantly leased, income-producing property.

Robert Powell is chief investment officer; J. Garnett Nelson is client contact.

APAM-Atlantic Portfolio Analytics & Management

201 E. Pine St., Orlando, Fla. 32801;
(407) 843-7110

Total assets managed	$1,136,000,000
Total discretionary assets	$1,136,000,000
Discretionary tax-exempt	$431,000,000
Fixed-income indexed assets	$431,000,000
Types of accounts managed	G
Tax-exempt clients	1
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	11

APAM-Atlantic Portfolio Analytics & Management Inc. specializes in mortgage-backed securities.

The firm's sole focus is quantitative analysis and research, operations, settlement and client reporting for mortgage-backed securities and derivative products.

Jon M. Knight is chief investment officer; Nicholas R. Whitcraft is client contact.

Apex Asset Management

4100 Campus Drive, Suite 200,
Newport Beach, Calif. 92660; (714)
752-2120

Total assets managed	$6,000,000
Total discretionary assets	$6,000,000
Discretionary tax-exempt	$2,000,000
Types of accounts managed	C
Tax-exempt clients	9
Minimum separate account	$150,000
No. of portfolio managers	1

Apex Asset Management Inc. offers active equity and fixed-income and balanced management.

Its equity approach combines Graham & Dodd analysis and growth stocks. It concentrates on the economic environment and specific fundamentals of a company. Interest rate anticipation is used for fixed income.

Dorothea Zimberoff is chief investment officer and client contact.

Argus Investment Management

1165 Coast Village Road, Santa
Barbara, Calif. 93105; (805)
969-4999

Total assets managed	$255,000,000
Total discretionary assets	$255,000,000
Discretionary tax-exempt	$162,000,000
International equity assets	$27,000,000
Types of accounts managed	CEF
Tax-exempt clients	73
Minimum separate account	$1,000,000
No. of portfolio managers	4

Argus Investment Management is an active equity, balanced and tactical asset allocation manager.

Equities are selected with a value bias plus insider and proprietary technical accumulation. Sector rotation and Graham & Dodd principles are used.

Interest rate anticipation is used in fixed income.

James Alphier is chief investment officer; Timothy R. Alward is client contact.

Argus Investors' Counsel

17 Battery Place, 18th Floor, New
York, N.Y. 10004; (212) 425-7500

Total assets managed	$1,037,000,000
Total discretionary assets	$899,000,000
Discretionary tax-exempt	$899,000,000
Types of accounts managed	CEFU
Tax-exempt clients	10
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	20

Argus Investors' Counsel Inc. is an active equity manager.

Its equity approach is broadly diversified, specializing in mid- to large-cap stocks. It invests in one company in each of 40 to 60 industries. Approximate equal weightings of holdings are maintained by following a strict contra-market rebalancing process. For foundations and endowments, a high yield/growth-of-income approach is used.

Herman I. Roseman is chief investment officer; Michael J. Bonner is client contact.

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: Government
U: Union

Ariel Capital Management

307 N. Michigan Ave., Chicago, Ill.
60601; (312) 726-0140

Total assets managed	$1,168,000,000
Total discretionary assets	$1,033,000,000
Discretionary tax-exempt	$851,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	45
No. of portfolio managers	2
Size of research staff	1

Ariel Capital Management Inc., an active equity manager, uses Graham & Dodd analysis to seek undervalued companies with p/es of less than 11 and the potential to grow at 15% or more annually.

John W. Rogers Jr. is chief investment officer; Dance Wright is client contact.

Ariston Capital Management

12301 N.E. 10th Place, Suite 250,
Bellevue, Wash. 98005; (206)
454-1600

Total assets managed	$46,000,000
Total discretionary assets	$46,000,000
Discretionary tax-exempt	$26,000,000
Types of accounts managed	CG
Tax-exempt clients	32
Minimum separate account	$100,000
No. of portfolio managers	2
Size of research staff	2

Ariston Capital Management Corp. is a convertible securities manager.

Its approach combines growth, emerging growth and low p/e stocks with sector rotation and long-term market forecasting. Undervalued convertibles are used as a low-risk equity alternative. In fixed-income, interest rate anticipation is used.

Richard B. Russell is chief investment officer; Frederick L. Denman is client contact.

Armstrong Shaw Associates

32 Threadneedle Lane, Stamford,
Conn. 06902; (203) 356-0284

Total assets managed	$259,000,000
Total discretionary assets	$236,000,000
Discretionary tax-exempt	$90,000,000
Types of accounts managed	CFU
Tax-exempt clients	16
Minimum separate account	$3,000,000
No. of portfolio managers	2
Size of research staff	1

Armstrong Shaw Associates Inc. is an active equity and balanced manager.

It has a disciplined, absolute value approach to the equity market, investing in securities where a rigid cash flow or asset appraisal determines the stock is selling at a substantial discount to intrinsic value.

Raymond J. Armstrong is chief investment officer and client contact.

Arnold Investment Counsel

700 N. Water St., Milwaukee, Wis.
53202; (414) 271-2726

Total assets managed	$505,000,000
Discretionary tax-exempt	$325,000,000
Types of accounts managed	CFU
Tax-exempt clients	180
Minimum separate account	$1,000,000
No. of portfolio managers	4

Arnold Investment Counsel Inc. is an active equity, active fixed-income and balanced manager.

In equities, the firm takes a patient, disciplined, low-risk, contrarian approach to undervalued, large-cap, liquid issues. Cash is raised when necessary.

Fixed-income commitments vary with the firm's perception of changes in inflation. Investments are only in highly liquid, investment-grade securities.

David R. Aushwitz is chief investment officer; Lili Gust is client contact.

Aronson + Fogler

230 S. Broad St., 20th Floor,
Philadelphia, Pa. 19102; (215)
546-7500

Total assets managed	$200,000,000
Total discretionary assets	$200,000,000
Discretionary tax-exempt	$200,000,000
Types of accounts managed	CEF
Tax-exempt clients	5
Minimum separate account	$10,000,000
No. of portfolio managers	4

Aronson + Fogler is an active equity manager following a value-oriented, quantitative and unemotional approach. The model-driven philosophy emphasizes classical security analysis; decision-making is computerized; trading includes crossing and package approaches.

Theodore R. Aronson and H. Russell Fogler are chief investment officers; James S. Lobb is client contact.

_P&I's_ money movers section details manager hirings by tax-exempt investors. Please send the information regarding new accounts to:

Pete Retzbach
Pensions & Investments
740 N. Rush St.
Chicago, Ill. 60611
(312) 649-5390.

ASB Capital Management
655 15th St. N.W., Suite 800,
Washington, D.C. 20005; (202)
383-6389

Total assets managed	$7,523,000,000
Total discretionary assets	$7,331,000,000
Discretionary tax-exempt	$6,061,000,000
401(k)/457 assets managed	$20,000,000
Equity real estate assets	$351,000,000
Mortgage assets	$616,000,000
Equity indexed assets	$600,000,000
Dedicated/immunized assets	$58,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	147
Minimum separate account	$5,000,000
No. of portfolio managers	15
Size of research staff	5

ASB Capital Management Inc. is an active and passive equity, active and passive fixed-income, balanced, real estate and short-term manager.

Its equity approach is oriented toward relative value; attractive securities are identified by quantitative ranking of value and fundamental factors. Sector emphasis is made accordingly.

Its fixed-income approach combines interest rate anticipation, maturity and sector shifts, swaps and arbitrage and timely selection of issues.

For real estate, the firm invests in high-quality, income-producing properties constructed with union labor, through participating and convertible mortgages and joint ventures.

Terence W. Collins is chief investment officer; Philip St. G. Cocke is client contact.

Ashfield & Co. Inc.
750 Battery St., Suite 700, San
Francisco, Calif. 94111; (415)
391-4747

Total assets managed	$736,000,000
Total discretionary assets	$736,000,000
Discretionary tax-exempt	$308,000,000
401(k)/457 assets managed	$17,000,000
Types of accounts managed	CEF
Tax-exempt clients	54
Minimum separate account	$1,000,000
No. of portfolio managers	6
Size of research staff	6

Ashfield & Co. Inc. is an active equity and fixed-income and balanced manager.

The firm's equity approach emphasizes growth stocks with investments concentrated in small and midsize companies with accelerating earnings and consistently high returns on assets and equity.

Its primary fixed-income approach uses interest rate anticipation, and is based upon relative value in attractive, high-quality market sectors.

J. Stephen Thornborrow is chief investment officer; Bradley J. Fretz is client contact.

Ashland Management
26 Broadway, New York, N.Y. 10004;
(212) 425-2803

Total assets managed	$976,000,000
Total discretionary assets	$976,000,000
Discretionary tax-exempt	$827,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	87
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	3

Ashland Management, an active equity and short-term manager, seeks quality growth stocks with low p/es. Graham & Dodd Analysis is used.

Charles C. Hickox is chief investment officer; Minot Amory is client contact.

Associated Capital Investors
580 California St., San Francisco,
Calif. 94104; (415) 393-0300

Total assets managed	$4,200,000,000
Total discretionary assets	$4,200,000,000
Discretionary tax-exempt	$2,100,000,000
Types of accounts managed	CU
Tax-exempt clients	103
Minimum separate account	$2,000,000
No. of portfolio managers	15

Associated Capital Investors is an active and passive equity, active and passive fixed-income and balanced manager.

Its equity approach emphasizes value-oriented situations with above-average S&P total expected return potential with a bias toward companies that exhibit superior growth and profit characteristics.

Its active fixed-income management consists of moderate adjustments in duration accompanied by an emphasis in security and sector shifts. High-yield bond management is offered.

Thomas Kelley is chief investment officer; D.R. Rossi is client contact.

Associated Kellogg Bank
200 N. Adams, Green Bay, Wis.
54303; (414) 433-3100

Total assets managed	$889,000,000
Total discretionary assets	$583,000,000
Discretionary tax-exempt	$197,000,000
Pooled accounts	$197,000,000
Mortgage assets	$1,000,000
International equity assets	$22,000,000
Tax-exempt clients	662
Types of accounts managed	CEFU
Minimum separate account	$1,000,000
No. of portfolio managers	5

Associated Kellogg Bank is an active and passive equity, passive fixed-income, balanced, passive international/global equity and short-term manager.

Its equity approach uses growth, emerging growth and low p/e stocks. It emphasizes quantitative analysis and Graham & Dodd principles. Its fixed-income approach is passive.

Kenneth Nimmer is chief investment officer; Richard Langer is client contact.

Atalanta/Sosnoff Capital
101 Park Ave., New York, N.Y. 10178;
(212) 867-5000

Total assets managed	$1,886,000,000
Total discretionary assets	1,886,000,000
Discretionary tax-exempt	$1,724,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	32
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	2

Atalanta/Sosnoff Capital Corp. is an active equity and balanced manager.

Its primary equity approach emphasizes growth stock, involving thematics and stock selection. The firm seeks to identify change, and enhances the process by identifying "event driven" companies with changes in product profile, management philosophy and earnings power.

Its fixed-income approach uses interest rate anticipation and sector analysis. The firm avoids concentration in long maturities.

Martin T. Sosnoff is chief investment officer; May Mahr is client contact.

Athene Coronado Management Corp.
26 Broadway, New York, N.Y. 10004;
(212) 422-6920

Total assets managed	$75,000,000
Total discretionary assets	$75,000,000
Discretionary tax-exempt	$75,000,000
Types of accounts managed	CU
Tax-exempt clients	6
Minimum separate account	$5,000,000
No. of portfolio managers	1
Size of research staff	1

Athene Coronado Management Corp., an active equity manager, specializes in merger arbitrage. The firm invests in stocks of companies with announced mergers, tenders and reorganizations.

Richard Hownika is client contact.

Atlanta Capital Counseling
1360 Peachtree St., Suite 1110,
Atlanta, Ga., 30309; (404) 874-1110

Total assets managed	$265,000,000
Total discretionary assets	$265,000,000
Discretionary tax-exempt	$50,000,000
Types of accounts managed	C
Tax-exempt clients	10
Minimum separate account	$1,000,000
No. of portfolio managers	4

Atlanta Capital Counseling is an active equity, active fixed-income and balanced manager.

Its equity investment decision-making process is based on the principle that in the long term, the growth in stock prices has a high correlation with dividend growth.

The fixed-income forecasting methodology is based primarily on the analysis of inflation and interest rate forecasts. Using a weighted average technique, this enables the firm to evaluate multiple forecasts.

Allen W. Post Jr. and Willis Dobbs Jr. are chief investment officers; Hunter W. Groton is client contact.

Audit Investments Inc.
136 Summit Ave., Suite 200,
Montvale, N.J. 07645; (201)
358-2735

Total assets managed	7,150,000
Discretionary tax-exempt	$6,500,000
Types of accounts managed	CF
Tax-exempt clients	2
Minimum separate account	$3,000,000
No. of portfolio managers	1
Size of research staff	2

Audit Investments Inc. concentrates investments in tradeable securities of seasoned equity owners and property developers.

Kenneth D. Campbell is chief investment officer and client contact.

Austin & Calvert Inc.
112 E. Pecan, Suite 2800, San
Antonio, Texas 78205; (512)
224-8241

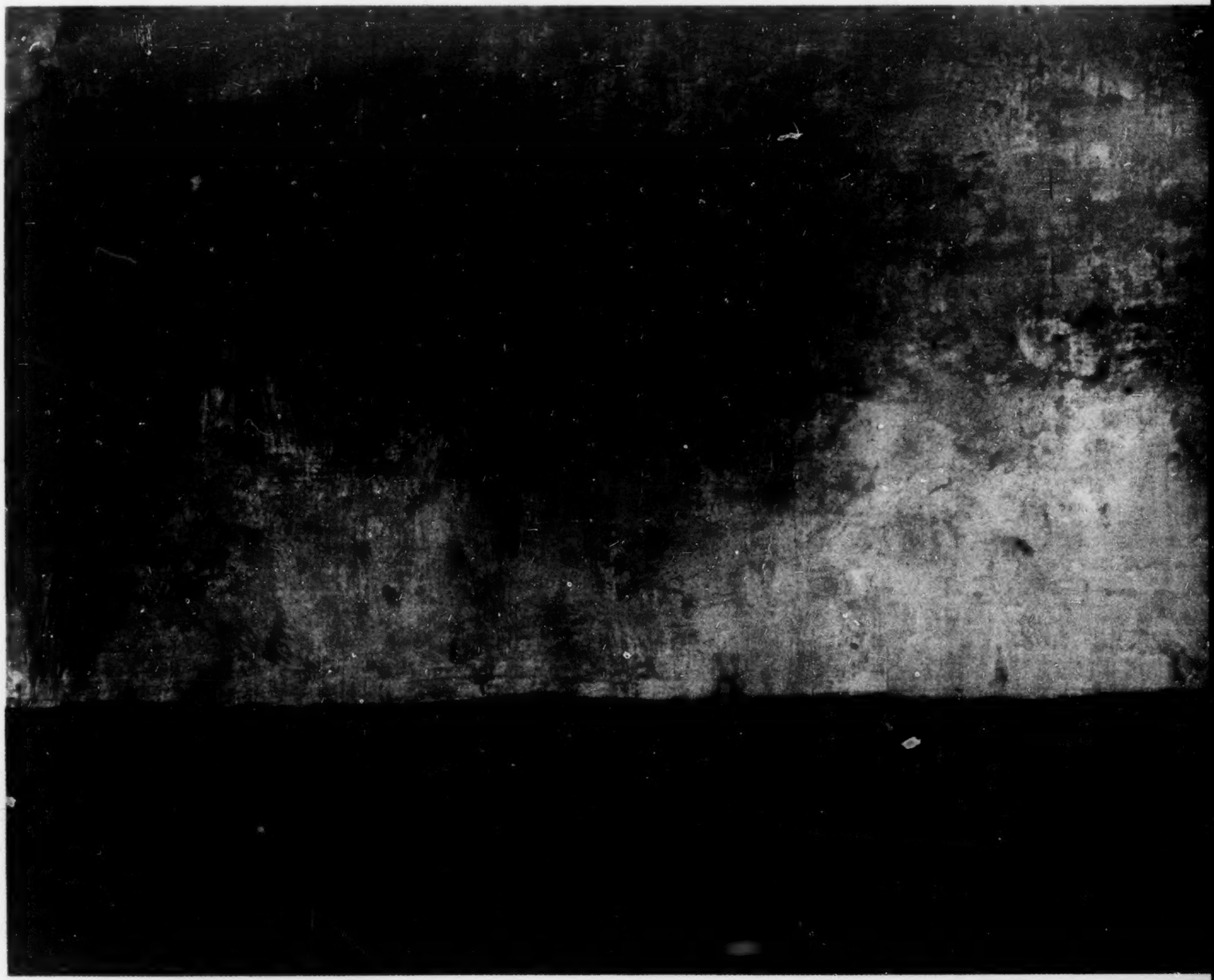
Total assets managed	$550,000,000
Total discretionary assets	$540,000,000
Discretionary tax-exempt	$225,000,000
401(k)/457 assets managed	$1,000,000
Types of accounts managed	CEFG
Tax-exempt clients	41
Minimum separate account	$2,000,000
No. of portfolio managers	5
Size of research staff	2

Austin & Calvert Inc. is an active equity and fixed-income and balanced manager.

In equities, it invests in companies and industries undergoing significant change where there is value, measured by both relative and absolute equity disciplines.

Its fixed-income approach emphasizes interest rate anticipation and is event driven, which leads to maturity/duration shifts and/or sector rotation.

THE CREATION OF VALUE



The Creation of Value *by Brad Holland, New York City. "To create," said the artist, "is to mediate between a void and an abstraction." The creation of value depends on action, and action depends on ideas.*

Harry M. Flavin is chief investment officer; Edward H. Austin Jr. is client contact.

Avatar Associates
900 Third Ave., New York, N.Y. 10022;
(212) 753-7710

Total assets managed	$1,900,000,000
Total discretionary assets	$1,700,000,000
Discretionary tax-exempt	$1,700,000,000
401(k)/457 assets managed	$300,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	108
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	5

Avatar Associates is a tactical asset allocation manager.

In its two-way (stocks/cash) and three-way (stocks/bonds/cash) accounts, Avatar actively changes the portfolio asset mix based on proprietary quantitative research. Decisions are made through active security selection, index funds or futures.

Edward S. Babbitt Jr. is chief investment officer; Bruce L. Poliquin is client contact.

Master trust: Oct. 1

Axe-Core Investors Inc.
Axe Castle, 400 Benedict Ave.,
Tarrytown, N.Y. 10591; (914)
333-5222

See entry for AXE-HOUGHTON MANAGEMENT INC.

Axe-Houghton international
35 Dover St., London W1X 3RA, U.K.;
01-499-4838

See entry for AXE-HOUGHTON MANAGEMENT INC.

Axe-Houghton Management
400 Benedict Ave., Tarrytown, N.Y.
10591; (914) 631-8131

Total assets managed	$9,523,000,000
Total discretionary assets	$9,523,000,000
Discretionary tax-exempt	$1,123,000,000
401(k)/457 assets managed	$24,000,000
International equity assets	$295,000,000
Equity indexed assets	$789,000,000
Types of accounts managed	CFGU
Tax-exempt clients	20
Minimum separate account	$5,000,000
No. of portfolio managers	11
Size of research staff	23

Axe-Houghton Management Inc. is an active and passive equity, active fixed-income, balanced and short-term manager. Through its subsidiaries, international/global passive equity active international/global fixed-income and index-based management are offered.

Its active equity approach emphasizes growth and emerging growth stocks. Balanced portfolios are allocated between the growth equity approach and fixed-income investments. Options and stock index futures are used.

Its primary fixed-income approach is one of duration management, based on a multiscenario economic outlook and management of risk associated with quality spreads, sector weighting and issue selection.

John L. Schroeder is chief investment officer; Stephen J. Darby Jr. is client contact.

The following subsidiaries' assets are reflected in the data above:

- Axe-Core Investors Inc. manages $789 million in tax-exempt assets.

The firm uses index fund technology to customize domestic and international equity portfolios.

Seth M. Lynn is chief investment officer; Brian J. Harris is client contact.

- Axe-Houghton International Ltd. is an international fixed-income manager based in London. Henry H. Livingston III is chief investment officer.

J.H. Ayres & Co. Inc.
2016 Condor St., Colorado Springs,
Colo. 80909; (719) 635-1414

Total assets managed	$2,400,000,000
Total discretionary assets	$2,400,000,000
Discretionary tax-exempt	$2,400,000,000
Types of accounts managed	C
Tax-exempt clients	193
Minimum separate account	$100,000
No. of portfolio managers	2
Size of research staff	2

J.H. Ayres & Co. Inc. is a market timing/tactical asset allocation manager.

The firm monitors changes in monetary policy and shifts between being invested 100% in equity mutual funds and 100% in money market mutual funds.

James H. Ayres is chief investment officer and client contact.

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: Government
U: Union

B

David L. Babson & Co. Inc.
1 Memorial Drive, Cambridge, Mass.
02142; (617) 225-3800

Total assets managed	$2,730,000,000
Total discretionary assets	$1,926,000,000
Discretionary tax-exempt	$658,000,000
Types of accounts managed	CEFU
Tax-exempt clients	84
Minimum separate equity account	$1,000,000
Minimum separate bond account	$5,000,000
No. of portfolio managers	14
Size of research staff	6

David L. Babson & Co. Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach uses growth and emerging growth stocks. Emphasis is on reasonably valued, high-quality companies with the potential for above-average earnings growth.

In fixed income, sector analysis is used, emphasizing high-grade, special value bonds, controlled maturity risk and active trading. Portfolios are actively managed to maximize total return.

Peter C. Thompson is chief investment officer and client contact.

Babson-Stewart Ivory International
1 Memorial Drive, Cambridge, Mass.
02142; (617) 225-3800

Total assets managed	$81,000,000
Total discretionary assets	$81,000,000
Discretionary tax-exempt	$73,000,000
International equity assets	$73,000,000
Types of accounts managed	C
Tax-exempt clients	4
Minimum separate account	$1,000,000
No. of portfolio managers	17

Babson-Stewart Ivory International is an active international/global equity manager.

The firm, a bottom-up stock selector, uses growth and low p/e stocks. Selection is based on a company's prospects of profitability, growth and valuation. Portfolios include medium- and small-cap stocks.

John G.L. Wright is chief investment officer; Peter C. Thompson is client contact.

Back Bay Advisors Inc.
399 Boylston St., Boston, Mass.
02116; (617) 578-1500

Total assets managed	$5,582,000,000
Total discretionary assets	$5,582,000,000
Discretionary tax-exempt	$1,041,000,000
Equity indexed assets	$173,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	397
Minimum separate account	$5,000,000
No. of portfolio managers	8
Size of research staff	4

Back Bay Advisors Inc. is a passive equity, active domestic and international fixed-income and short-term manager.

In enhanced core portfolios, the fixed-income approach makes duration, sector and individual security adjustments within pre-set parameters around a benchmark index, based on interest rate anticipation, sector analysis and credit research.

Charles T. Wallis is chief investment officer; Antwine Jefferson III is client contact.

Julius Baer Investment Management Inc.
330 Madison Ave., New York, N.Y.
10017; (212) 949-9055

Total assets managed	$756,000,000
Total discretionary assets	$756,000,000
Discretionary tax-exempt	$693,000,000
International equity assets	$51,000,000
International fixed-income assets	$642,000,000
Types of accounts managed	CFG
Tax-exempt clients	14
Minimum separate account	$10,000,000
No. of portfolio managers	5

Julius Baer Investment Management Inc. is a domestic and international/global active equity, fixed-income and balanced manager.

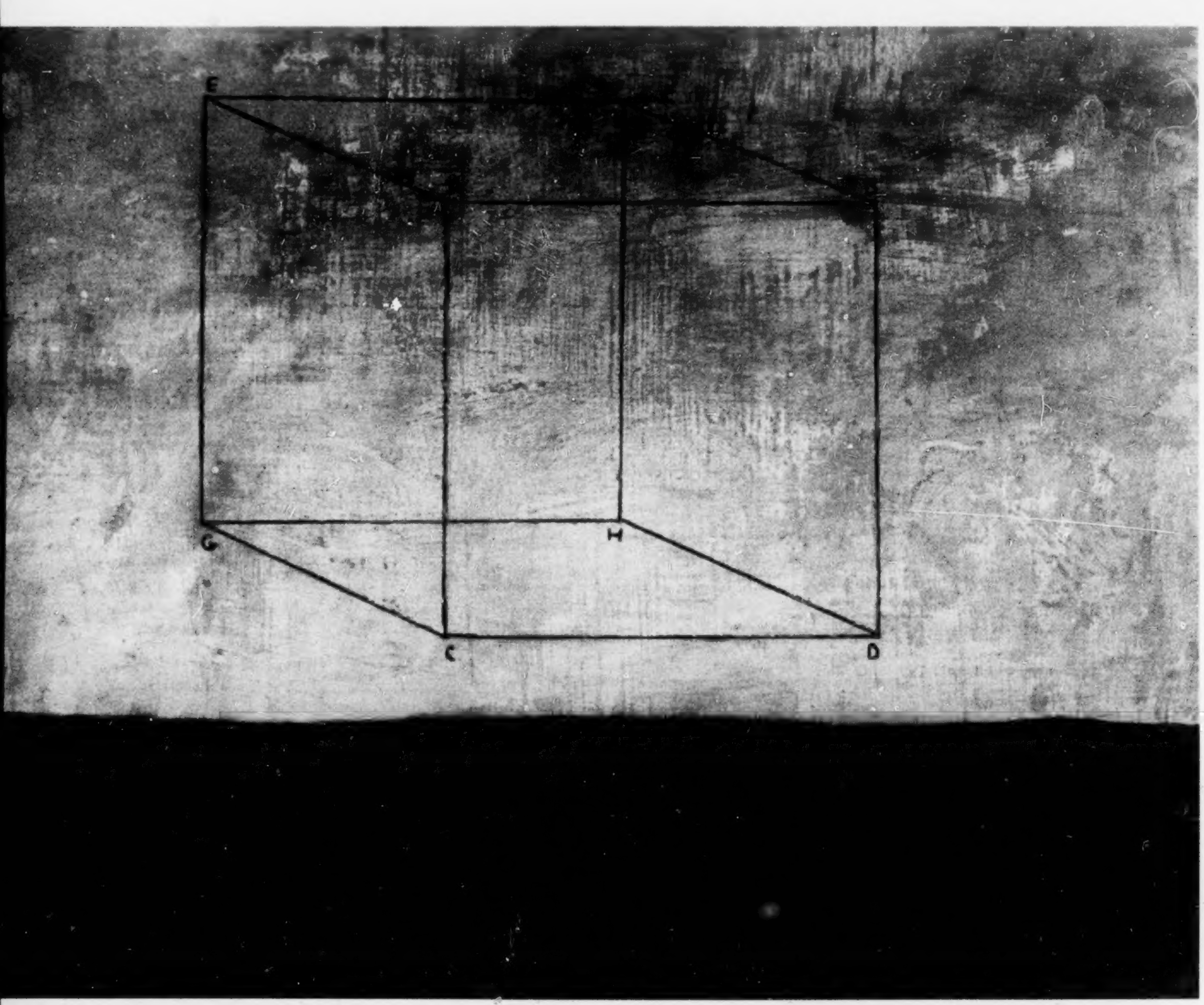
Its equity approach uses growth stocks and sector rotation. Country allocations are based on expected total return, and stock selection emphasizes large, stable growth companies and industry trends.

In fixed income, it uses interest rate anticipation, sector analysis and currency mix. Currency weightings are based on total return forecasts, with or without hedging. Bond selection emphasizes government and high-quality issues with medium maturities.

Peter J. Widmer is chief investment officer; Jay A. Dirnberger is client contact.

Bailard Biehl & Kaiser
2755 Campus Drive, San Mateo, Calif.
94403; (415) 571-5800

Total assets managed	$1,300,000,000
Total discretionary assets	$1,300,000,000
Discretionary tax-exempt	$300,000,000
401(k)/457 assets managed	$4,000,000
Equity real estate assets	$30,000,000
International equity assets	$39,000,000
International cash assets	$7,000,000
Types of accounts managed	CFG



The creation of value for institutional real estate investors results from the definition and disciplined application of ideas.

At The Yarmouth Group, we define investment objectives and establish portfolio strategies based on clients' needs. We achieve these objectives through strictly enforced investment criteria, active asset management, and careful operational control of each asset.

At The Yarmouth Group, ideas lead to action and action leads to the creation of value.

THE YARMOUTH GROUP
REAL ESTATE INVESTMENT ADVISORS

THE YARMOUTH GROUP, INC. • NEW YORK 212/555-4810 • CHICAGO 312/861-1105 • ATLANTA 404/251-0400 • LOS ANGELES 213/955-7979 • SAN FRANCISCO 415/392-1090 • LONDON (AFFILIATE) 01-408-1525

Tax-exempt clients	30
Minimum separate account	$2,000,000
No. of portfolio managers	5
Size of research staff	7

Bailard Biehl & Kaiser is a multiasset investment manager.

Portfolios are diversified globally, using stocks, bonds real estate and cash. Active asset allocation, based on multiple scenario modelling, is used to enhance returns. Options are used.

David R. Rahn is chief investment officer; Brian E. Schaefer is client contact.

Baillie Gifford Overseas Ltd.

7 Glenfinlas St., Edinburgh EH3 6YY
U.K.; 031-225-2581

Total assets managed	$5,626,000,000
Total discretionary assets	$5,626,000,000
Discretionary tax-exempt	$16,000,000
International equity assets	$15,000,000
International cash assets	$1,000,000
Types of accounts managed	C
Tax-exempt clients	1
Minimum separate account	$10,000,000
No. of portfolio managers	20
Size of research staff	6

Baillie Gifford Overseas Ltd. is an active international/global equity, fixed-income and balanced manager.

Its primary equity approach is based on fundamental research of both companies and countries. It seeks well-managed companies with good growth potential. It also runs a variety of regional funds (Japan, Europe, U.K., Far East). Options are used.

Gavin Gemmell is chief investment officer; Ross Lidstone is client contact.

Balch, Hardy, Scheinman & Winston Inc.

501 Fifth Ave., New York, N.Y. 10017;
(212) 661-6290

Total assets managed	$2,200,000,000
Total discretionary assets	$2,200,000,000
Discretionary tax-exempt	$2,200,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	13
Minimum separate account	$20,000,000

Balch, Hardy, Scheinman & Winston Inc. is an active equity and options manager.

Its option overwriting strategy, which accounts for $2.1 billion under management, writes options on another manager's equity holdings. Its quantitative equity strategy, WealthMax (for which it actively manages $100 million) uses a multifactor risk model to build high return, low-risk portfolios.

Bill Balch is chief investment officer; Steve Hardy is client contact.

The Balcor Co.

4849 Golf Road, Skokie, Ill. 60077;
(708) 677-2900

Total assets managed	$4,800,000,000
Total discretionary assets	$1,900,000,000
Discretionary tax-exempt	$1,900,000,000
Equity real estate assets	$532,000,000
Mortgage assets	$1,368,000,000
Types of accounts managed	CEGU
Tax-exempt clients	79
Minimum separate account	$25,000,000
No. of portfolio managers	20
Size of research staff	25

The Balcor Co. is a real estate investment management company with businesses based in development, finance and management. The firm is a long-term investor, focusing on effective property and portfolio management to create and sustain value.

Tom Meador is chief investment officer; John Powell is client contact.

Banc One Asset Management Corp.

100 E. Broad St., Columbus, Ohio
43271; (614) 248-5245

Total assets managed	$1,206,000,000
Total discretionary assets	$1,206,000,000
Discretionary tax-exempt	$491,000,000
Pooled accounts	$168,000,000
Separate accounts	$323,000,000
International equity assets	$9,000,000
Equity indexed assets	$14,000,000
Tax-exempt clients:	
Commingled	9
Separate	11
Types of accounts managed	CEFU
Minimum separate account	$10,000,000
No. of portfolio managers	6

Banc One Asset Management Corp. is an active and passive equity, active fixed-income, balanced and active international/global equity manager.

Its equity approach is highly disciplined, analyzing long-term financial characteristics of a company and then comparing the current price of the stock against its projected value.

For fixed-income, half of a portfolio is fully invested matching the duration of a selected benchmark, with the balance actively managed with emphasis on the yield curve, sectors and issues.

James D. Wright is chief investment officer; James R. Janetz is client contact.

BancOklahoma Trust Co.

P.O. Box 2300, Tulsa, Okla. 74192;
(918) 588-6465

Total assets managed	$2,232,000,000
Total discretionary assets	$2,232,000,000
Discretionary tax-exempt	$1,714,000,000
Pooled accounts	$337,000,000
Separate accounts	$1,377,000,000
401(k)/457 assets managed	$767,000,000
Tax-exempt clients:	
Commingled	910
Separate	580
Types of accounts managed	CEFU
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	2

BancOklahoma Trust Co. is an active and passive equity, active and passive fixed-income, balanced and short-term manager.

Its primary equity approach is top-down, using growth stocks. Industry groups are selected based on economic forecasts, with fundamental research done on companies within each sector. Stock index futures are used.

The firm's primary fixed-income approach is top-down, with maturities based on interest rate anticipation. Government, agency, corporate and mortgage-backed issues are used.

Rudy M. Thomas is chief investment officer; Ed Hare is client contact.

Bane Barham & Holloway Investment Advisors Inc.

811 S.W. Front Ave., Suite 410,
Portland, Ore. 97204; (503)
222-1993

Total assets managed	$80,000,000
Total discretionary assets	$80,000,000
Discretionary tax-exempt	$40,000,000
401(k)/457 assets managed	$1,000,000
Types of accounts managed	C
Tax-exempt clients	200
Minimum separate account	$100,000
No. of portfolio managers	3
Size of research staff	3

Bane Barham & Holloway Investment Advisors Inc. is an active and passive equity and balanced manager.

Its equity approach is value oriented, targeting characteristics such as a strong balance sheet, established profitability, discount from intrinsic value, low relative p/e and unrecognized potential.

Mark Holloway is chief investment officer; Kurt Gusinde is client contact.

Bank of Boston

100 Federal St., Boston, Mass. 02110;
(617) 434-7346

Total assets managed	$221,000,000
Total discretionary assets	$221,000,000
Discretionary tax-exempt	$221,000,000
Pooled accounts	$182,000,000
Separate accounts	$39,000,000
Real estate equity assets	$129,000,000
Mortgage assets	$73,000,000
Tax-exempt clients:	
Commingled	127
Separate	3
Types of accounts managed	G
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	5

Bank of Boston, a real estate manager, focuses on achieving a high net income return with subsequent long-term growth and appreciation. Investments are diversified by property type, location and investment structure.

Thomas J. Lunny is chief investment officer; William V. Tanski is client contact.

Bank IV

P.O. Box 4, Wichita, Kan. 67226; (316)
261-4555

Total assets managed	$6,309,000,000
Total discretionary assets	$1,252,000,000
Discretionary tax-exempt	$195,000,000
Pooled accounts	$61,000,000
Separate accounts	$134,000,000
Tax-exempt clients:	
Commingled	258
Separate	199
Types of accounts managed	CEFG
No. of portfolio managers	11
Size of research staff	3

Bank IV is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach emphasizes stock selection based on multiquantitative methods and fundamental analysis, using bottom-up stock selection with a top-down economic process for cash allocation decisions. In fixed income, it uses a variety of issues to outperform the targeted benchmark by controlled adjustments to portfolio duration and sector.

John S. Maurer Jr. is chief investment officer; Roger A. Ramseyer is client contact.

Bank of Ireland Asset Management Ltd.

3 First National Plaza, Suite 1400,
Chicago, Ill. 60602; (312) 419-8224

Total assets managed	$1,000,000
Total discretionary assets	$1,000,000
Discretionary tax-exempt	$1,000,000
International equity assets	$1,000,000
Types of accounts managed	C
Tax-exempt clients	1
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	6

Bank of Ireland Asset Management Ltd., an active international/global equity manager, uses a value-oriented, concentrated and primarily bottom-up approach. Economic and market analyses identify themes and specify selection criteria; country allocations and currency considerations also are made.

William R. Cotter is chief investment officer; Gerald Colleary is client contact.

The Bank of New York

One Wall St., New York, N.Y. 10286;
(212) 635-6920

Total assets managed	$25,617,000,000
Total discretionary assets	$25,617,000,000
Discretionary tax-exempt	$11,113,000,000
Pooled accounts	$1,300,000,000
Separate accounts	$9,813,000,000
Equity indexed assets	$93,000,000
Fixed-income indexed assets	$90,000,000
Dedicated/immunized assets	$2,000,000,000
Tax-exempt clients:	
Commingled	105
Separate	238
Types of accounts managed	CEFGU
Minimum separate account	$5,000,000
No. of portfolio managers	20
Size of research staff	17

The Bank of New York is an active and passive equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach has a long-term value and growth orientation.

Its active fixed-income approach takes a long-term value orientation, focusing on real yields and anticipation of change. Interest rate anticipation and sector analysis also are used.

Charles L. Booth, executive vice president, is chief investment officer; Douglas D. Brown, vice president, is client contact.

Bank One Dayton

40 N. Main St., Dayton Ohio 45402;
(513) 449-8659

Total assets managed	$1,675,000,000
Discretionary tax-exempt	$100,000,000
Equity indexed assets	$3,000,000
Types of accounts managed	CEF
Minimum separate account	$1,000,000
Tax-exempt clients:	
Commingled	250
Separate	50
No. of portfolio managers	5

Bank One Dayton is an active and passive equity, active and passive fixed-income, balanced, tactical asset allocation and short-term manager.

Its equity approach is value-oriented, using a dividend discount-model. Its fixed-income approach combines active and duration management to reduce portfolio volatility.

The firm has $50 million in tax-exempt collective funds managed on its behalf by Banc One Asset Management and not included here.

David Y. Handir is chief investment officer; Donald C. Middendorf is client contact.

Bank One, Indianapolis

111 Monument Circle, Suite 1721,
Indianapolis, Ind. 46277; (317)
321-8151

Total assets managed	$7,500,000,000
Total discretionary assets	$5,900,000,000
Discretionary tax-exempt	$4,500,000,000
Pooled accounts	$360,000,000
Separate accounts	$4,140,000,000
Dedicated/immunized assets	$250,000,000
Tax-exempt clients:	
Commingled	131
Separate	387
Types of accounts managed	CEFGU
Minimum separate account	$5,000,000
No. of portfolio managers	15
Size of research staff	5

Bank One, Indianapolis is an active and passive equity, active fixed-income, balanced, short-term and GIC manager.

In equities, the bank takes a value-oriented approach. Stock selection focuses on a bottom-up approach involving analysis of cash flow, revenue and current vs. historical price. In fixed-income, emphasis is given to controlling maturity and duration of a portfolio given the economic outlook and its implications for the trend in interest rates. Options are used.

Leif E. Nulsen is chief investment officer; Phillip E. Chambers is client contact.

Bank South

55 Marietta St., P.O. Box 4387,
Atlanta, Ga. 30302; (404) 529-4549

Total assets managed	$700,000,000
Total discretionary assets	$700,000,000
Discretionary tax-exempt	$192,000,000
Pooled accounts	$55,000,000
Separate accounts	$137,000,000
Tax-exempt clients:	
Commingled	156
Separate	73
Types of accounts managed	CEF
No. of portfolio managers	7

Bank South is an active equity and fixed-income, balanced, tactical asset allocation and short-term manager.

Its primary equity approach is value-oriented, focusing on growth and low p/e stocks. Sector rotation and tactical asset allocation are used. Its fixed-income approach uses interest rate anticipation and sector analysis.

G. Michael Smith is client contact.

Bank of Tokyo Trust Co.

100 Broadway, New York, N.Y. 10005;
(212) 766-3400

Total assets managed	$290,000,000
Total discretionary assets	$290,000,000
Discretionary tax-exempt	$290,000,000
Pooled accounts	$150,000,000
Separate accounts	$140,000,000
401(k)/457 assets managed	$88,000,000
Tax-exempt clients:	
Commingled	105
Separate	17
Types of accounts managed	C
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	2

Bank of Tokyo Trust Co. is an active equity, active fixed-income, balanced and short-term manager.

The equity approach is top-down, combining market timing and sector rotation. It uses technical analysis to participate in short and intermediate market cycles. Its fixed-income approach uses interest rate anticipation and yield-spread analysis.

Charles E. Ryan is chief investment officer; Kevin F. Crowley is client contact.

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Firm	$ mils.*
Bankers Trust	79,829
Wells Fargo	79,069
State Street Bank	54,077
Mellon Bank	53,634
J.P. Morgan	44,018
Capital Guardian	20,439
Chase	16,604
Northern Trust	15,287
Trust Co./West	12,819
Boatmen's Trust	12,535
Bank of New York	12,109
First Interstate	11,976
American Nat'l/Chicago	11,529
Ameritrust	9,811
Fidelity Mgmt. Trust	9,776
NCNB Nat'l Bank	9,727
Nat'l City	9,244
Harris Trust	9,104
Chemical Bank	8,620
PNC Financial	8,352
TSB Group	8,032
Nat'l Bank/Detroit	7,000
Citizens & Southern	6,759
First Wachovia	6,432
Fleet/Norstar	6,300
Total	**523,082**

*Discretionary, tax-exempt assets, including subsidiaries

Bank of the West Trust & Financial Services

P.O. Box 1121, San Jose, Calif.
95108; (408) 998-6857

Total assets managed	$160,000,000
Total discretionary assets	$160,000,000
Discretionary tax-exempt	$32,000,000
Pooled accounts	$1,000,000
Separate accounts	$31,000,000
401(k)/457 assets managed	$21,000,000
Tax-exempt clients:	
Commingled	7
Separate	26
Types of accounts managed	CFG
Minimum separate account	$100,000
No. of portfolio managers	1

Bank of the West Trust & Financial Services is an active equity, active fixed-income and balanced manager.

Stocks selected have strong and growing cash flow, strong industry position, excellent balance sheets and reasonable valuation. In fixed-income it uses interest rate anticipation.

Joseph W. Hefner is chief investment officer; Donald L. Draper is client contact.

Bankers Trust Co.

665 Locust, Des Moines, Iowa 50309;
(515) 245-2415

Total assets managed	$823,000,000
Total discretionary assets	$130,000,000
Discretionary tax-exempt	$50,000,000
Pooled accounts	$10,000,000
Separate accounts	$40,000,000
401(k)/457 assets managed	$17,000,000
Real estate equity assets	$1,000,000
Tax-exempt clients:	
Commingled	22
Separate	44
Minimum separate account	$300,000
No. of portfolio managers	3

Bankers Trust Co. is an active equity, passive fixed-income, balanced and short-term manager.

Its equity approach focuses on low p/e stocks, emphasizing historical relative and dividend yields of high-quality companies. The firm's fixed-income approach uses laddering of one- to seven-year maturities.

Doug Angstrom is chief investment officer; William Feller is client contact.

Bankers Trust Co.

280 Park Ave., New York, N.Y. 10017;
(212) 850-2262

Total assets managed	$101,246,000,000
Total discretionary assets	$96,929,000,000
Discretionary tax-exempt	$79,829,000,000
Pooled accounts	$31,655,000,000
Separate accounts	$48,174,000,000
401(k)/457 assets managed	$2,643,000,000
Mortgage assets	$3,193,000,000
International equity assets	$1,260,000,000
International fixed-income assets	$11,000,000
Equity indexed assets	$33,882,000,000
Fixed-income indexed assets	$3,301,000,000
Dedicated/immunized assets	$4,445,000,000
Tax-exempt clients:	
Commingled	202
Separate	242
Types of accounts managed	CEFGU
Minimum separate account	$10,000,000
No. of portfolio managers	23
Size of research staff	5

Bankers Trust Co is an active and passive equity, active and passive fixed-income, balanced, tactical asset allocation, active international/global equity and fixed-income manager, passive international/global equity manager, short-term and GIC manager.

Through units in New York, Tokyo, London and Sydney, active and passive capabilities for a variety of domestic and international strategies are offered. Options, stock index futures and fixed-income futures are used.

H. Kent Atkins is chief investment officer; Mike Fisher is client contact.

Baring America Asset Management Co. Inc.

77 Franklin St., Boston, Mass. 02110;
(617) 357-8480

Total assets managed	$1,307,000,000
Total discretionary assets	$1,307,000,000
Discretionary tax-exempt	$1,191,000,000
Types of accounts managed	CEFG
Tax-exempt clients	28
Minimum separate account	$5,000,000
No. of portfolio managers	10
Size of research staff	4

Baring America Asset Management Co. Inc. is an active equity, active fixed-income and balanced manager.

Its equity strategy is a disciplined approach to growth stock management with emphasis placed on sector diversification and relative earnings growth at the proper valuation. It offers two equity products: traditional and quantitative. Options are used.

Its fixed-income approach uses sector rotation and issue selection to add value, while interest rate risk is controlled within narrow bands. Investment-grade, controlled sector mix and high-yield bond management are offered.

O. Leonard Darling is chief investment officer; Shaun R. Levesque and James P. Macmillan are client contacts.

Baring International Investment Ltd.

155 Bishopsgate, London, U.K. EC2M
3X4; 011-441-628-6000

Total assets managed	$4,095,000,000
Total discretionary assets	$4,095,000,000
Discretionary tax-exempt	$3,586,000,000
International equity assets	$2,495,000,000
International fixed-income assets	$941,000,000
International cash assets	$150,000,000
Types of accounts managed	CEFG
Tax-exempt clients	34
Minimum separate account	$20,000,000

Baring International Investment Ltd. is an active global/international equity and fixed-income manager.

Its primary equity approach looks for relative value within national markets, employing emerging growth stocks, low p/e ratios and market timing/tactical asset allocation.

Its primary fixed-income approach uses relative currency attraction and interest rate anticipation. Forwards are used.

Peter Hartley is chief investment officer; John McNamara is client contact.

Weaver C. Barksdale & Associates

30 Burton Hills Blvd., Nashville, Tenn.
37215; (615) 665-1085

Total assets managed	$610,000,000
Total discretionary assets	$610,000,000
Discretionary tax-exempt	$610,000,000
401(k)/457 assets managed	$4,500,000
Types of accounts managed	CEFGU
Tax-exempt clients	17
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	2

Weaver C. Barksdale & Associates, an active fixed-income manager, offers three strategies: the "short duration" approach, the "intermediate" strategy and the "full spectrum" style. In each, yield enhancement, sector/security value analysis and product duration adjustment are key tactics used to achieve client objectives. Options are used.

Weaver C. Barksdale is chief investment officer; John E. McDowell is client contact.

Barnett Banks Trust Co.

P.O. Box 40200, Jacksonville, Fla.
32203; (904) 464-2343

Total assets managed	$5,295,000,000
Total discretionary assets	$5,295,000,000
Discretionary tax-exempt	$1,397,000,000
Pooled accounts	$292,000,000
Separate accounts	$1,105,000,000
Tax-exempt clients:	
Commingled	500
Separate	200
Types of accounts managed	CEFGU
Minimum separate account	$5,000,000
No. of portfolio managers	18
Size of research staff	7

Barnett Banks Trust Co. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach uses a multiple quantitative screening process to find stocks displaying sound quality, high relative value and strong momentum in earnings expectations. In fixed income, maturity selection is based on interest rate expectations, yield

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curve configurations and multiscenario total return computations. Quality and sector weightings are based on current and historic yield spreads and creditworthiness.

John L. Allen is chief investment officer; Robert Bartkowiak is client contact.

Baron Capital Management

450 Park Ave., New York, N.Y. 10021;
(212) 759-7700

Total assets managed	$110,000,000
Total discretionary assets	$110,000,000
Discretionary tax-exempt	$75,000,000
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	1
Size of research staff	3

Baron Capital Management, an active equity manager, invests in small to medium-size U.S. companies whose securities are valued at less than 50% of the cost to purchase similar assets or businesses in private transactions; where value is increasing by 15% per annum; and that have the potential to be acquired or to increase in price at least 50% within two years.

Ron Baron is chief investment officer; David Schneider is client contact.

Barrow, Hanley, Mewhinney & Strauss Inc.

200 Crescent Court, 19th Floor,
Dallas, Texas 75201; (214)
871-5300

Total assets managed	$8,478,000,000
Total discretionary assets	$8,478,000,000
Discretionary tax-exempt	$8,478,000,000
Dedicated/immunized assets	$350,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	75
Minimum separate equity account	$50,000,000
Mininmum separate bond account	$20,000,000
No. of portfolio managers	8

Barrow, Hanley, Mewhinney & Strauss Inc. is an active equity and fixed-income, balanced, short-term and dedicated/immunized manager.

Its equity approach emphasizes low p/e, high dividend yield and low price/book ratios.

Fixed-income portfolios reflect a high yield to maturity, a high current yield, high quality and a conservative maturity structure. Assets are concentrated in undervalued sectors.

Peter F. Bridge is client contact.

Bartlett & Co.

36 E. Fourth St., Cincinnati, Ohio
45202; (513) 621-4612

Total assets managed	$1,796,000,000
Total discretionary assets	$1,785,000,000
Discretionary tax-exempt	$358,000,000
Mortgage assets	$7,000,000
International equity assets	$45,000,000
International fixed-income assets	$1,000,000
Tax-exempt clients	169
Minimum separate account	$500,000
No. of portfolio managers	15
Size of research staff	5

Bartlett & Co. is an active equity and fixed-income, balanced, real estate, active international equity and short-term manager.

Its equity approach centers on low p/e stocks and Graham & Dodd analysis in a value-oriented strategy emphasizing asset values and strong financial positions. Its fixed-income approach uses sector analysis. Options and financial futures are used.

For real estate, it seeks overlooked commercial and industrial properties with an emphasis on current income.

Donald S. Schmidt is chief executive officer; Kathy Lang-Albright is client contact.

Batterymarch: Agrivest

500 Winding Brook Drive,
Glastonbury, Conn. 06033; (203)
659-3711

Total assets managed	$300,000,000
Total discretionary assets	$300,000,000
Discretionary tax-exempt	$0
Minimum separate account	$25,000,000

Batterymarch: Agrivest is a real estate manager that makes conservative, value-oriented investments, both equity and debt, in agricultural real estate in the major U.S. agricultural regions.

George E. Schwab is chief investment officer; James B. McCandless is client contact.

Batterymarch: Canada

49 Wellington St. E., Toronto, Ontario
M5E 1C9; (416) 865-9333

Total assets managed	$300,000,000
Total discretionary assets	$300,000,000
Discretionary tax-exempt	$300,000,000
For subsidiaries of U.S. firms	$50,000,000
Non-North American equities	$29,000,000
Non-North American cash	$1,000,000
Tax-exempt clients	14
U.S. subsidiaries	3
Types of accounts managed	C
Minimum separate account	$5,000,000
No. of portfolio managers	4

Batterymarch: Canada, a Canadian firm, is an active equity, active fixed-income, balanced and active international/global equity manager.

Its equity approach is conservative, value-driven and non-consensus. In fixed-income, it minimizes interest rate risk with durations targeted to a benchmark or matched to liabilities.

Tania Zouikin is chief investment officer; Robert Mitchell is client contact.

Batterymarch Financial Management

600 Atlantic Ave., Boston, Mass.
02210; (617) 973-9300

Total assets managed	$10,083,000,000
Total discretionary assets	$10,017,000,000
Total discretionary tax-exempt	$7,297,000,000
International equity assets	$1,455,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	67
Minimum separate account	$10,000,000
No. of portfolio managers	11

Batterymarch Financial Management is an active domestic and international/global equity and emerging markets funds manager.

The value manager believes the highest probability of success lies in having an independent view and in developing insights and valuation techniques to implement that view.

Dean LeBaron is chief investment officer; William H. Yankus is client contact.

The foreign business survey will be published July 23.

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Baxter Brothers Inc.

1030 E. Putnam Ave., Greenwich,
Conn. 06836; (203) 637-4559

Total assets managed	$40,000,000
Total discretionary assets	$40,000,000
Discretionary tax-exempt	$25,000,000
Types of accounts managed	CF
Tax-exempt clients	50
Minimum separate account	$100,000
No. of portfolio managers	2
Size of research staff	2

Baxter Brothers Inc. is an active and passive equity, passive fixed-income and balanced manager.

Its equity approach uses a very conservative buy and hold philosophy, with gold representing about 10% of the holdings. Its fixed-income approach uses interest rate anticipation.

William J. Baxter is chief investment officer. William J. Baxter Jr. is client contact.

Baxter Capital Management

115 W. Washington St., Indianapolis,
Ind. 46204; (317) 635-7119

Total assets managed	$558,000,000
Total discretionary assets	$558,000,000
Discretionary tax-exempt	$358,000,000
Types of accounts managed	CFG
Tax-exempt clients	5
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	1

Baxter Capital Management Inc., formerly Baxter & Hoops Inc., is an active and passive fixed-income and short-term manager.

Portfolio duration is varied by using interest rate anticipation based upon business cycle analysis. The firm also uses sector analysis with an emphasis on the quality of holdings.

Gary Baxter is chief investment officer. David Buren is client contact.

BayBanks Investment Management

175 Federal St., Boston, Mass. 02110;
(617) 482-1040

Total assets managed	$1,450,000,000
Total discretionary assets	$1,450,000,000
Discretionary tax-exempt	$780,000,000
Pooled accounts	$89,000,000
Separate accounts	$691,000,000
401(k)/457 assets managed	$82,000,000
Equity indexed assets	$4,000,000
Fixed-income indexed assets	$40,000,000
Tax-exempt clients	
Commingled	180
Separate	53
Types of accounts managed	CEFGU
Minimum separate account	$500,000
No. of portfolio managers	9
Size of research staff	2

BayBanks Investment Management is an active equity, active and passive fixed-income and balanced manager.

Its primary equity approach is quantitative. Stocks are selected based on quality, earnings growth consistency and market capitalization ranked on current operating and market characteristics.

The firm's fixed-income approach uses a passive core with an active component based on interest rate anticipation and spread analysis.

L. Sumner Hopkins II is chief investment officer; Eugene D. Mahoney is client contact.

BEA Associates Inc.

153 E. 53rd St., New York, N.Y.
10022; (212) 832-2626

Total assets managed	$9,676,000,000
Total discretionary assets	$9,676,000,000
Discretionary tax-exempt	$8,877,000,000
International equity assets	$134,000,000
Equity indexed assets	$1,233,000,000
Fixed-income indexed assets	$458,000,000
Dedicated/immunized assets	$713,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	179
Minimum separate account	$5,000,000

BEA Associates Inc. is an active and passive equity, active and passive fixed-income, balanced, active international/global equity, short-term and currency hedging manager.

The firm uses a value-oriented equity approach, seeking situations where it disagrees with consensus estimates of cash flows and discount rates.

The firm structures its fixed-income portfolios to resemble client-specified benchmarks, adding value through issue and sector selection and swapping.

Albert L. Zesiger is chief investment officer; Paula Treneer is client contact.

Beacon Capital Management

48 Wall St., 19th Floor, New York,
N.Y. 10005; (212) 495-1020

Total assets managed	$1,058,000,000
Total discretionary assets	$1,058,000,000
Discretionary tax-exempt	$996,000,000
Dedicated/immunized assets	$30,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	30
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	2

Beacon Capital Management Co. Inc. is an active and passive equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

Its primary equity approach emphasizes tactical asset allocation, which considers monetary, economic, technical and valuation measures.

Its fixed-income approach uses a similar system. Treasuries and agencies mainly are bought.

Samson Wang is chief investment officer. James C. Vogelzang, (303) 629-1900, is client contact.

Bear Stearns Asset Management

245 Park Ave., New York, N.Y. 10167;
(212) 272-2814

Total assets managed	$3,392,000,000
Total discretionary assets	$3,392,000,000
Discretionary tax-exempt	$3,199,000,000
401(k)/457 assets managed	$100,000,000
Fixed-income indexed assets	$278,000,000
Dedicated/immunized assets	$75,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	110
Minimum separate account	$10,000,000
No. of portfolio managers	10

Bear Stearns Asset Management is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach is value-oriented focusing on companies that are underpriced relative to their future growth potential. The underlying belief is that companies with accelerating earnings will outperform the broad market.

Its fixed-income approach is conservative, investing primarily in U.S. government securities. Portfolio average maturities are adjusted according to interest rate trends.

Neil T. Eigen and Peter E. Mahoney are chief investment officers. Milton B. Rubin and John F. Boneparth are client contacts.

P.E. Becker Inc.

1211 S.W. Fifth Ave., Suite 2185,
Portland, Ore. 97204; (503)
223-1720

Total assets managed	$410,000,000
Total discretionary assets	$410,000,000
Discretionary tax-exempt	$242,000,000
Types of accounts managed	CEFU
Tax-exempt clients	62
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	2

P.E. Becker Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach uses strong fundamental research to identify companies with low expectations, low p/e multiples and strong financials.

Its fixed-income approach focuses on sector analysis, seeking the best values at a given time, relative to risk.

Patrick E. Becker is chief investment officer; Jerry Brown is client contact.

Benchmark Asset Management Inc.

2200 Space Park Drive, Suite 208,
Houston, Texas 77058 (713)
333-1400

Total assets managed	$112,000,000
Total discretionary assets	$112,000,000
Discretionary tax-exempt	$112,000,000
Types of accounts managed	CGU
Tax-exempt clients	14
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	1

Benchmark Asset Management Inc. is an active equity and balanced manager.

Its equity approach emphasizes cash flow. Cash flow converts to return on capital and asset growth that form relative valuation benchmarks when contrasted to the company's price to adjusted book value.

Its fixed-income approach is based on interest rate anticipation.

Robert D. Harrell is chief investment officer; Gregg Smolenski is client contact.

Bennett & Kahnweiler Realty Advisors

9700 W. Bryn Mawr, Rosemont, Ill.
60018; (708) 671-7911

Total assets managed	$440,000,000
Total discretionary assets	$440,000,000
Discretionary tax-exempt	$440,000,000
Equity real estate assets	$300,000,000
Mortgage assets	$140,000,000
Types of accounts managed	G
Tax-exempt clients	2
Minimum separate account	$25,000,000
No. of portfolio managers	2
Size of research staff	3

Bennett & Kahnweiler Realty Advisors is a real estate manager.

The firm constructs and manages custom-tailored separate accounts, emphasizing Midwestern properties.

James S. Smith is chief investment officer; Ronald A. Gold is client contact.

Berg Capital Corp.

888 Seventh Ave., New York, N.Y.
10106; (212) 956-7400

Total assets managed	$86,000,000
Total discretionary assets	$86,000,000
Discretionary tax-exempt	$42,000,000
Types of accounts managed	CF
Tax-exempt clients	11
Minimum separate account	$2,000,000
No. of portfolio managers	2

Berg Capital Corp. is an equity-oriented manager emphasizing capital growth and preservation of capital. Fundamental analysis is used to identify unrecognized value in specific securities and to adjust stock, bond and cash positions as warranted by perceived changes in the investment environment.

Jonathan A. Berg is chief investment officer; Deborah C. Foord is client contact.

Berger Associates Inc.

899 Logan St., Suite 211, Denver,
Colo. 80203; (303) 837-1020

Total assets managed	$57,000,000
Total discretionary assets	$57,000,000
Discretionary tax-exempt	$6,000,000
401(k)/457 assets managed	$2,000,000
International equity assets	$1,000,000
Types of accounts managed	CEF
Tax-exempt clients	12
Minimum separate account	$250,000
No. of portfolio managers	2
Size of research staff	1

Berger Associates Inc. is an active equity, balanced and short-term cash manager.

Its equity approach emphasizes growth and emerging growth stocks. The firm manages municipal bond portfolios exclusively in pre-refunded issues and secured by government bonds in escrow. Options are used.

William M.B. Berger is chief investment officer; Rodney L. Linafelter is client contact.

Sanford C. Bernstein & Co.

767 Fifth Ave., New York, N.Y. 10153;
(212) 486-5800

Total assets managed	$17,317,000,000
Total discretionary assets	$17,317,000,000
Discretionary tax-exempt	$14,555,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	396
Minimum separate account	$400,000
No. of portfolio managers	31
Size of research staff	49

Sanford C. Bernstein & Co. Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach is value-oriented, using Graham & Dodd analysis to seek extreme mispricings. Value is defined by the relationship of price to long-term earnings and dividends.

The firm's fixed-income approach uses sector analysis. Value is added by identifying mispriced securities, exploiting distortions in the yield curve and shifting the interest rate risk of the portfolio.

Peter A. Carman is chief investment officer; Richard S. Abramson is client contact.

Bessemer Trust Co.

630 Fifth Ave., New York, N.Y. 10111;
(212) 708-9100

Total assets managed	$8,812,000,000
Total discretionary assets	$7,590,000,000
Discretionary tax-exempt	$857,000,000
Separate accounts	$857,000,000
401(k)/457 assets managed	$5,000,000
International equity assets	$194,000,000
Tax-exempt clients	88
Types of accounts managed	CEF
Minimum separate account	$5,000,000
No. of portfolio managers	14
Size of research staff	10

Bessemer Trust Co. is an active equity, active fixed-income, balanced, real estate, active international equity and fixed-income and short-term manager.

Its core equity approach uses market cycle/market theme analysis. It anticipates changes, identifies themes and overweights sectors it feels will be favorably affected.

Fixed-income portfolios are managed within client objectives to preserve capital and enhance returns.

Specialized investments such as real estate provide a hedge against inflation and improve diversification.

John R. Whitmore is chief investment officer; Robert C. Elliott is client contact.

Beutel, Goodman Capital Management Ltd.

2030 Texas Commerce Tower,
Houston, Texas 77002; (713)
221-1790

Total assets managed	$1,404,000,000
Total discretionary assets	$1,404,000,000
Discretionary tax-exempt	$1,404,000,000
Types of accounts managed	CEF
Tax-exempt clients	29
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	8

Boutel, Goodman Capital Management Ltd. is an active equity and balanced manager.

Its equity approach uses sector rotation and Graham & Dodd analysis. The firm seeks companies selling at a discount to their book or asset value, or at a low relative p/e multiple, given investment characteristics and forecasted earnings growth. Interest rate anticipation is used for fixed income.

Robert F. McFarland is chief investment officer; J. Philip Ferguson is client contact.

Beutel, Goodman International PLC

5-6 St. Andrew's Hill, London EC4V
5BY U.K.; 011-44-1-489-0218

Total assets managed	$399,000,000
Total discretionary assets	$399,000,000
Discretionary tax-exempt	$298,000,000
International fixed-income assets	$286,000,000
Types of accounts managed	CG
Tax-exempt clients	2
Minimum separate account	$10,000,000
No. of portfolio managers	2

Beutel, Goodman International PLC is an active international/global fixed-income manager.

The firm applies relative value analysis across countries. The focus of the approach is active country allocation in liquid markets. The firm principally uses high-quality securities with maturities at the medium to long end of the market.

Olaf Rogge is chief investment officer. John Makowske, (203) 254-1215, is client contact.

BGH Central Investment Management Ltd.

2 First Canadian Place, Suite 1010,
Toronto, Ontario M5X 1E3; (416)
869-0161

Total assets managed	$2,442,000,000
Total discretionary assets	$2,442,000,000
Discretionary tax-exempt	$2,330,000,000
For subsidiaries of U.S. firms	$240,000,000
Equity indexed assets	$100,000,000
Types of accounts managed	CEFGU
Minimum separate account	$10,000,000
No. of portfolio managers	9

BGH Central Investment Management Ltd., a Canadian firm, is an active and passive equity, active fixed-income, balanced and short-term manager.

Its primary equity approach is quantitative and value-oriented, using emerging growth stocks and sector rotation. Its primary fixed-income approach uses interest rate anticipation and sector analysis.

Paul Black is client contact.

Bigler/Crossroads

190 Farmington Ave., Farmington,
Conn. 06032; (203) 676-9890

Total assets managed	$550,000,000
Discretionary tax-exempt	$550,000,000
Types of accounts managed	CEG
Tax-exempt clients	30
Minimum separate account	$20,000,000

Bigler/Crossroads is a venture capital manager.

Harold E. Bigler Jr. is chief investment officer; Peter M. Seigle is client contact.

Birtcher Realty Advisors Inc.

27611 La Paz Road, Laguna Niguel,
Calif. 92656; (714) 643-7525

Total assets managed	$2,343,000,000
Total discretionary assets	$2,343,000,000
Total discretionary tax-exempt	$543,000,000
Equity real estate assets	$543,000,000
Types of accounts managed	CGU
Tax-exempt clients	19
Minimum separate account	$30,000,000
No. of portfolio managers	4
Size of research staff	3

Birtcher Realty Advisors Inc., a real estate manager, acquires a portfolio of substantially leased industrial, distribution, retail and office properties with value-added opportunities in prime suburban markets where operational-level expertise is required.

Albert S. Nagy is chief investment officer; Stanley L. Iezman and Ralph E. Heckert are client contacts.

Bishop Trust Co. Ltd.

1000 Bishop St., Honolulu, Hawaii
96813; (808) 523-2111

Total assets managed	$1,982,000,000
Total discretionary assets	$1,500,000,000
Discretionary tax-exempt	$189,000,000
Real estate equity assets	$7,000,000
Tax-exempt clients	430
Types of accounts managed	CEFU
Minimum separate account	$250,000
No. of portfolio managers	5

Bishop Trust Co. Ltd. is an active equity, active fixed-income, balanced, real estate and short-term manager.

Its equity approach focuses on companies showing unexpectedly strong earnings, coupled with emphasis on low p/e ratios.

In fixed-income, the company has a strong quality orientation and heavy emphasis on risk avoidance. Economic judgment is the major basis.

The real estate strategy involves vigorous analysis of property potential.

Herbert Ho is chief investment officer; J. Ronald Clark is client contact.

George D. Bjurman & Associates

10100 Santa Monica Blvd., Suite
2300, Los Angeles, Calif. 90067;
(213) 553-6577

Total assets managed	$665,000,000
Total discretionary assets	$665,000,000
Discretionary tax-exempt	$603,000,000
401(k)/457 assets managed	$3,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	41
Minimum separate account	$1,000,000
No. of portfolio managers	4

George D. Bjurman & Associates is an active equity, active fixed-income and balanced manager.

For equities, the firm employs a value/growth-oriented investment approach, with emphasis on high-quality companies with strong earnings and dividend growth prospects.

Fixed-income assets are strategically invested, using an active approach that focuses on shifts in maturity, sector, quality and coupon structure.

O. Thomas Barry III is client contact.

Midyear investment bank rankings will be published July 9.

BK Associates

425 N. Martingale Road, Suite 1350,
Schaumburg, Ill. 60173; (708)
240-2240 or (402) 392-7975

Total assets managed	$589,000,000
Total discretionary assets	$589,000,000
Discretionary tax-exempt	$346,000,000
401(k)/457 assets managed	$1,000,000
Types of accounts managed	CEFG
Tax-exempt clients	50
Minimum separate account	$10,000,000
No. of portfolio managers	2
Size of research staff	7

BK Associates is an active equity and options hedging manager.

Its equity approach has a growth rotational flavor, combined with a sophisticated options hedging and return enhancement program.

Carl K. Bufka is chief investment officer; W. Bruce Remington is client contact.

William Blair & Co.

135 S. LaSalle St., Chicago, Ill. 60603;
(312) 236-1600

Total assets managed	$2,707,000,000
Total discretionary assets	$2,277,000,000
Discretionary tax-exempt	$970,000,000
International equity assets	$50,000,000
Mortgage assets	$10,000,000
Types of accounts managed	CEF
Tax-exempt clients	130
Minimum separate account	$1,500,000
No. of portfolio managers	13
Size of research staff	17

William Blair & Co. is an active equity, active fixed-income, balanced and short-term manager.

Its primary equity approach emphasizes emerging growth and growth stocks. The firm identifies stocks where stable growth, conservative finances and established quality managements should lead to long-term capital appreciation.

Its primary fixed-income approach emphasizes individual security selection in high-quality, intermediate (one- to 10-year) maturity bonds to achieve the best combination of safety, incremental yield, term structure and terms of the contract.

Conrad Fischer is chief investment officer; Rocky Barber is client contact.

Arnhold and S. Bleichroeder International

45 Broadway, New York, N.Y. 10006;
(212) 943-9200

Total assets managed	$450,000,000
Total discretionary assets	$450,000,000
Discretionary tax-exempt	$450,000,000
International equity assets	$450,000,000
Types of accounts managed	C
Tax-exempt clients	10
Minimum separate account	$10,000,000
No. of portfolio managers	2
Size of research staff	1

Arnhold and S. Bleichroeder International is an active international equity manager.

Its primary approach focuses on earnings and rate of return. The firm selects a maximum of 30 securities for each portfolio, focusing on unique fundamentals and attractive risk-reward valuations, and targeting a 50% rate of return for each stock over a 12- to 24-month period.

Howard B. Moss is chief investment officer; Frederic C. Reynolds is client contact.

BMI Capital Corp.

67 Wall St., New York, N.Y. 10005;
(212) 422-1619

Total assets managed	$515,000,000
Total discretionary assets	$515,000,000
Discretionary tax-exempt	$369,000,000
Types of accounts managed	CFGU
Tax-exempt clients	13
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	7

BMI Capital Corp., an active equity manager, uses internal research to invest in companies with high earnings growth, selling below private market value. Emphasis is on small- to medium-capitalization issues.

James D. Awad is chief investment officer; Sandra A. Jerro is client contact.

Boatmen's Trust Co.

100 N. Broadway, St. Louis, Mo.
63102; (314) 466-3800

Total assets managed	$25,236,000,000
Total discretionary assets	$13,008,000,000
Discretionary tax-exempt	$12,535,000,000
Pooled accounts	$958,000,000
Separate accounts	$11,577,000,000
401(k)/457 assets managed	$527,000,000
Real estate equity assets	$17,000,000
International equity assets	$182,000,000
Equity indexed assets	$430,000,000
Fixed-income indexed assets	$18,000,000
Dedicated/immunized assets	$300,000,000
Tax-exempt clients:	
Commingled	385
Separate	462
Types of accounts managed	CEFGU
Minimum separate account	$1,000,000
No. of portfolio managers	21
Size of research staff	9

Boatmen's Trust Co. is an active and passive equity, active and passive fixed-income, balanced, real estate, active international/global equity and short-term manager.

Its active stock approach seeks to identify and purchase undervalued securities, selling when they become fairly valued or overvalued. It looks for superior rates of return with the lowest possible risk exposure. Its active fixed-income approach bases the average maturity of portfolios on anticipated interest rates and inflation.

Its real estate approach concentrates on equity investments placed in a way that ensures the benefits of diversification.

Robert Franklin and Thomas Darnall are chief investment officers. Richard W. Hibbs is client contact.

Bollinger & Co. Inc.

717 17th St., Suite 1535, Denver,
Colo. 80202; (303) 292-0147

Total assets managed	$150,000,000
Total discretionary assets	$120,000,000
Discretionary tax-exempt	$120,000,000
Types of accounts managed	CEFG
Tax-exempt clients	15
Minimum separate account	$500,000
No. of portfolio managers	1

Bollinger & Co. Inc. is an active equity, active fixed-income and short-term manager.

Its equity approach emphasizes growth stocks, sector rotation and market timing. Its fixed-income approach uses interest rate anticipation.

Jay Guy Bollinger is chief investment officer and client contact.

Bolton Tremblay Inc.

70 University Ave., Suite 1000,
Toronto, Ontario M51 2M4; (416)
595-5201

Total assets managed	$2,566,000,000
Total discretionary assets	$2,566,000,000
Discretionary tax-exempt	$1,203,000,000
For subsidiaries of U.S. firms	$98,000,000
Tax-exempt clients	80
U.S. subsidiaries	4
Types of accounts managed	CEFU
No. of portfolio managers	13

Bolton Tremblay Inc., a Canadian firm, is an active equity, active fixed-income, balanced, active international equity and short-term manager.

The firm uses a three-tiered, value-oriented equity strategy with core holdings composed of large- and medium-cap stocks and a significant exposure to the small-cap sector through a pooled small-cap vehicle. Its fixed-income approach manages portfolios aggressively based on the interest rate outlook and spread trading.

Jean-Luc Landry is chief investment officer; Audrey Robinson is client contact.

The Boston Co. Inc.

1 Boston Place, Boston, Mass. 02108;
(617) 722-7000

Total assets managed	$24,482,000,000
Total discretionary assets	$22,472,000,000
Discretionary tax-exempt	$15,328,000,000
Equity real estate assets	$1,098,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	204
Minimum separate account	$5,000,000
No. of portfolio managers	21
Size of research staff	18

The Boston Co. Inc. is an active equity, active fixed-income, balanced, real estate and short-term manager.

Its equity approach uses quantitative value-oriented screening and emphasizes stocks undervalued in earnings and dividend growth with appreciation potential.

Its fixed-income approach combines modified interest rate anticipation, sector valuation, credit research and quantitative analysis.

The Boston Co. Real Estate Counsel Inc. takes an opportunistic approach to real estate investing by working with quality, seasoned developers and creating risk-insulated portfolios that outperform traditional asset allocation models.

Desmond J. Heathwood is chief investment officer; Paul F. Healey is client contact.

Boston Asset Management

31 Milk St., Boston, Mass. 02109;
(617) 426-6655

Total assets managed	$5,000,000
Total discretionary assets	$5,000,000
Discretionary tax-exempt	$4,000,000
Types of accounts managed	CF
Tax-exempt clients	6
Minimum separate account	$250,000
No. of portfolio managers	2

Boston Asset Management Inc. is an active equity, active fixed-income, balanced, active international equity and fixed-income, and short-term manager.

The equity approach is based on market timing and tactical asset allocation decisions primarily using low p/e cyclical stocks. The fixed-income approach uses interest rate anticipation and sector analysis, focusing on maturity and sector swaps in anticipation of secular change. Minor portfolio adjustments are made in anticipation of cyclical developments or market inefficiencies.

G. Peter Grote is chief investment officer and client contact.

Boston International Advisors Inc.

75 State St., Boston, Mass. 02109;
(617) 345-9550

Total assets managed	$1,367,000,000
Total discretionary assets	$1,367,000,000
Discretionary tax-exempt	$1,124,000,000
International equity assets	$1,105,000,000
Equity indexed assets	$394,000,000
Types of accounts managed	CFG
Tax-exempt clients	18
Minimum separate account	$25,000,000
No. of portfolio managers	6
Size of research staff	1

Boston International Advisors Inc. is an active and passive global international equity manager.

The firm uses quantitative value techniques to allocate among the EAFE markets and to select stocks within those markets. The firm also manages custom index funds such as GDP-weighted EAFE and South Africa-free, and provides currency hedging and investment in stock index futures, upon request.

Lyle H. Davis is chief investment officer; Jennifer Dunning is client contact.

Bounty Management Corp.

The Bedford Building, 99 Bedford St.,
Boston, Mass. 02111; (617)
357-8285

Total assets managed	$130,000,000
Total discretionary assets	$100,000,000
Discretionary tax-exempt	$68,000,000
Types of accounts managed	CEFU
Tax-exempt clients	57
Minimum separate account	$500,000
No. of portfolio managers	3

Bounty Management Corp. is an active equity, passive fixed-income and balanced manager.

Its primary equity strategy is fundamentally oriented, combining growth and value investing based on a contrarian approach.

In fixed income, it swings in and out on the Treasury yield curve based on year-to-year interest rate forecasts for long-term investments only.

Raymond N. Bligh is chief investment officer and client contact.

Bowen, Hanes & Co. Inc.

100 Galleria Parkway, Suite 670,
Atlanta, Ga. 30339; (404) 951-8891

Total assets managed	$650,000,000
Discretionary tax-exempt	$590,000,000
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	1

Bowen, Hanes & Co. Inc. is an active equity, active fixed income, real estate and active international/global equity manager.

Its equity approach uses low p/e and growth stocks. The firm uses a conservative, quality-oriented, top-down approach. Its fixed-income approach is based on interest rate anticipation.

In real estate, it seeks capital gains opportunities in undeveloped land.

Harold J. Bowen Jr. is chief investment officer; Jay Bowen is client contact.

Boylston Capital Advisors

501 Boylston St., Boston, Mass.
02117; (617) 578-2783

Total assets managed	$7,093,000,000
Total discretionary assets	$7,093,000,000
Discretionary tax-exempt	$3,754,000,000
Mortgage assets	$2,721,000,000
Types of accounts managed	CGU
Tax-exempt clients	2,500
Minimum separate account	$50,000,000
No. of portfolio managers	6
Size of research staff	2

Boylston Capital Advisors is a mortgage and private placements manager.

The firm seeks out the best return on mortgages and private placements given a client's risk/return profile.

Frederick K. Zimmermann is chief investment officer; Antwine Jefferson is client contact.

Boys, Arnold & Co.

P.O. Drawer 5255, Asheville, N.C.
28813; (704) 274-1542

Total assets managed	$210,000,000
Total discretionary assets	$210,000,000
Discretionary tax-exempt	$111,000,000
Types of accounts managed	CEF
Tax-exempt clients	65
Minimum separate account	$400,000
No. of portfolio managers	3
Size of research staff	1

Boys, Arnold & Co. is an active equity, active fixed-income and balanced manager.

Emphasizing low p/e and growth stocks and market timing, its equity approach is value-oriented, fundamental and disciplined.

Its fixed-income approach is driven by interest rate anticipation, emphasizing high quality, liquidity and sector and maturity diversification.

G. Waring Boys is chief investment officer; John B. Kuhns is client contact.

Bradford Investment Management

330 Commerce St., Nashville, Tenn.
37201; (615) 748-9422

Total assets managed	$110,000,000
Total discretionary assets	$110,000,060
Discretionary tax-exempt	$90,000,000
Types of accounts managed	CEFG
Tax-exempt clients	47
Minimum separate account	$250,000
No. of portfolio managers	2
Size of research staff	2

Bradford Investment Management is an active equity, active fixed-income and balanced manager.

Its primary equity approach is to invest in businesses with long-term records of increasing earnings and dividends at an above-average pace, strong balance sheets and high returns on equity.

Fixed-income relies on interest rate anticipation, emphasizing capital preservation and secure income using a laddered investment-grade bonds.

Bruce Cooke is chief investment officer; Thomas C. Pollock Jr. is client contact.

Bradford & Marzec Inc.

333 S. Hope St., Suite 4050, Los
Angeles, Calif. 90071; (213)
687-9170

Total assets managed	$1,542,000,000
Total discretionary assets	$1,542,000,000
Discretionary tax-exempt	$1,322,000,000
Types of accounts managed	CEFG
Tax-exempt clients	15
Minimum separate account	$20,000,000
No. of portfolio managers	3
Size of research staff	4

Bradford & Marzec Inc. is an active fixed-income manager.

Its primary fixed-income approach is to add value by capturing opportunities created by fundamental changes and inefficiencies in the investment relationships among bond market sectors.

Ted Bradford is chief investment officer; Eve Atchison is client contact.

Branch Banking & Trust Co.

P.O. Box 1847, Wilson, N.C. 27893;
(919) 399-4213

Total assets managed	$1,300,000,000
Total discretionary assets	$1,000,000,000
Discretionary tax-exempt	$500,000,000
Pooled accounts	$150,000,000
Separate accounts	$350,000,000
401(k)/457 assets managed	$300,000,000
Tax-exempt clients:	

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Commingled	50
Separate	75
Types of accounts managed	CEFGU
Minimum separate account	$1,000,000
No. of portfolio managers	4

Branch Banking & Trust Co. is an active equity, active fixed-income, balanced, tactical asset allocation, real estate and short-term manager.

Its equity approach use quantitative techniques, low p/e stocks and Graham & Dodd analysis.

David C. McMahon is chief investment officer; Trip Purcell is client contact.

Brandes Investment Management Inc.

12760 High Bluff Drive, Suite 160, San Diego, Calif. 92130; (619) 755-0239

Total assets managed	$166,000,000
Total discretionary assets	$166,000,000
Discretionary tax-exempt	$88,000,000
401(k)/457 assets managed	$3,000,000
International equity assets	$45,000,000
Types of accounts managed	CEF
Tax-exempt clients	223
Minimum separate account	$400,000
No. of portfolio managers	4
Size of research staff	1

Brandes Investment Management Inc., an active domestic and global equity manager, uses an approach that's global and value-oriented, using Graham & Dodd analysis to identify undervalued securities.

Charles Brandes is chief investment officer; W. Roberts Wood is client contact.

Brandywine Asset Management

3 Christina Centre, Suite 1200, 201 N. Walnut St., Wilmington, Del. 19801; (302) 654-6162

Total assets managed	$930,000,000
Total discretionary assets	$930,000,000
Discretionary tax-exempt	$890,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	32
Minimum separate account	$10,000,000
No. of portfolio managers	6

Brandywine Asset Management is an active and passive equity manager.

The firm invests exclusively in the lowest 25% of the p/e spectrum, producing consistent returns in excess of the market with controlled volatility.

W. Anthony Hitschler is chief investment officer; Frank G. Frey and Willard J. Scott are client contacts.

Stacey Braun Associates

377 Broadway, Eighth Floor, New York, N.Y. 10013; (212) 226-7707

Total assets managed	$1,424,000,000
Total discretionary assets	$1,419,000,000
Discretionary tax-exempt	$1,415,000,000
Types of accounts managed	CGU
Tax-exempt clients	97
Minimum separate account	$1,000,000
No. of portfolio managers	5

Stacey Braun Associates Inc. is an active equity and fixed-income and balanced manager.

Its equity approach uses Graham & Dodd-based analysis. The major criteria in selection are reasonably consistent earnings growth, low p/e multiples and dependable dividends for above-average yields. Its primary fixed-income approach uses interest rate anticipation.

Martin H. Wexler is chief investment officer and client contact.

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: Government
U: Union

Breau Capital Management

800 South St., Waltham, Mass. 02154; (617) 893-0600

Total assets managed	$142,000,000
Total discretionary assets	$142,000,000
Discretionary tax-exempt	$142,000,000
Types of accounts managed	CEF
Tax-exempt clients	8
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	1

Breau Capital Management Inc., an active equity manager, holds value-oriented portfolios emphasizing low p/e and price-to-book multiples, overlooked companies and undervalued assets.

Edward P. Breau is chief investment officer and client contact.

Daniel Breen & Co. L.P.

700 Louisiana, Suite 2650, Houston, Texas 77002; (713) 223-2110

Total assets managed	$1,501,000,000
Total discretionary assets	$1,501,000,000
Discretionary tax-exempt	$1,335,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	46
No. of portfolio managers	5
Size of research staff	1

Daniel Breen & Co. L.P. is an active equity, active fixed-income and balanced manager.

Its equity approach is value-based with an emphasis on redeployment of cash flow. Three types of value stocks are used, and these are blended based on an assessment of the market environment. In fixed income, unique correlation models anticipate changes in interest rate trends, not levels. No forecasting is done. Value is added through maturity decisions. Investments mainly are in Treasury securities.

Daniel A. Breen is chief investment officer; Edward S. McCullough and G. Gordon Biggar Jr. are client contacts.

Bridgewater Associates

372 Danbury Road, Wilton, Conn. 06897; (203) 762-8511

Total assets managed	$300,000,000
Total discretionary assets	$300,000,000
Discretionary tax-exempt	$125,000,000
Types of accounts managed	CU
Tax-exempt clients	5
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	5

Bridgewater Associates is an active domestic and international/global fixed-income, tactical asset allocation and short-term manager.

The firm evaluates the relative merits of major markets using fundamental and technical systems that monitor economic conditions and identify changes. It will go short at customer request.

The statistics above inclue Bridgewater Asset Management.

Ray Dalio is chief investment officer; Kevin Sullivan is client contact.

Brinson Partners Inc.

70 W. Madison St., Suite 112, Chicago, Ill. 60602-4298; (312) 220-7152

Total assets managed	$13,811,000,000
Total discretionary assets	$13,811,000,000
Discretionary tax-exempt	$13,411,000,000
401(k)/457 assets managed	$390,000,000
Equity real estate assets	$838,000,000
International equity assets	$1,624,000,000
International bond assets	$1,939,000,000
International cash assets	$220,000,000
Dedicated/immunized assets	$202,000,000
Types of accounts managed	CEFGU
Tax exempt clients	364

Brinson Partners Inc., formerly First Chicago Investment Advisors, is an active equity and fixed-income, balanced, tactical asset allocation, real estate, active international/global equity and fixed-income, short-term, venture capital and global asset allocation manager.

Its equity approach is value-oriented, based on fundamental research. It identifies mispriced securities in shifting market environments, selecting stocks within the context of disciplined judgments on market timing, sector exposures and industry.

For fixed income, a portfolio's interest rate, yield curve, quality/sector and issue-specific exposures are managed to outperform a selected benchmark during an interest rate cycle.

Its real estate approach focuses on building core portfolios of general purpose properties in proven markets diversified by type and region.

Gary P. Brinson is chief investment officer; Edward C. Hamill is client contact.

John W. Bristol & Co. Inc.

233 Broadway, New York, N.Y. 10279; (212) 267-9000

Total assets managed	$2,500,000,000
Total discretionary assets	$2,500,000,000
Discretionary tax-exempt	$2,000,000,000
Types of accounts managed	CEF
Tax-exempt clients	32
Minimum separate account	$30,000,000
No. of portfolio managers	6

John W. Bristol & Co. Inc. is an active equity and fixed-income and balanced manager.

Its equity approach uses growth stocks; its fixed-income approach, interest rate anticipation.

Charles H. Mott is chief investment officer and client contact.

Broadgate Asset Management Ltd.

4 Broadgate, London, EC2M 7LE, U.K.; 01-374-1650

See entry for SECURITY PACIFIC INVESTMENT GROUP.

Alex. Brown Investment Management

135 E. Baltimore St., Baltimore, Md. 21202; (301) 727-1700

Total assets managed	$1,416,000,000
Total discretionary assets	$1,330,000,000
Discretionary tax-exempt	$977,000,000
401(k)/457 assets managed	$7,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	77
Minimum separate account	$3,000,000
No. of portfolio managers	5
Size of research staff	2

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Alex. Brown Investment Management is an active equity and balanced manager.

Its equity approach is based on flexible stock selection with a focus on overlooked or out-of-favor stocks where favorable changes are creating significant appreciation potential.

Its fixed-income approach also is flexible. It uses government and corporate bonds, emphasizing quality issues with intermediate maturities.

J. Dorsey Brown III is chief investment officer and client contact.

Alex. Brown Realty Advisors

2 N. Charles St., Suite 850, Baltimore,
Md. 21201; (301) 783-3200

Total assets managed	$1,227,000,000
Total discretionary assets	$159,000,000
Discretionary tax-exempt	$159,000,000
Equity real estate	$75,000,000
Securities/private placements	$84,000,000
Types of accounts managed	CEFG
Tax-exempt clients	7
Minimum separate account	$50,000,000
No. of portfolio managers	4
Size of research staff	3

Alex. Brown Realty Advisors Inc., a real estate manager, specializes in all-cash acquisitions, joint ventures and equity-related commercial real estate investments.

It makes direct real estate investments of $2 million to $150 million in high-quality existing and to-be-built shopping centers, warehouse distribution, research development and office facilities.

Philip C. Iglehart and John W. Guinee III are chief investment officers. Mahlon Apgar IV is client contact.

Brown Brothers Harriman

59 Wall St., New York, N.Y. 10005;
(212) 493-1818

Total assets managed	$13,183,000,000
Total discretionary assets	$13,183,000,000
Discretionary tax-exempt	$5,186,000,000
401(k)/457 assets managed	$653,000,000
Mortgage assets	$790,000,000
International equity assets	$458,000,000
International fixed-income assets	$5,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	268
Minimum separate account	$5,000,000
No. of portfolio managers	74
Size of research staff	29

Brown Brothers Harriman & Co. is an active equity and fixed-income, balanced, active international global equity and fixed-income and short-term manager.

Based on fundamental analysis, sector rotation and value screening, its equity approach uses stock selection, diversification and market timing.

Its fixed-income approach is based on an active trading strategy employed in an effort to capture incremental returns through three complementary strategies: volatility control, sector allocations, and arbitrage trading.

Elbridge T. Gerry Jr. is chief investment officer; Paul A. Legvold is client contact.

Brundage, Story and Rose

1 Broadway, New York, N.Y. 10004;
(212) 269-3050

Total assets managed	$3,142,000,000
Total discretionary assets	$1,780,000,000
Discretionary tax-exempt	$1,201,000,000
International equity assets	$60,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	182
Minimum separate equity account	$5,000,000
Minimum separate bond account	$10,000,000
No. of portfolio managers	15
Size of research staff	4

Brundage, Story and Rose is an active equity, active fixed-income, balanced and natural resources manager.

Equity investments are made on the basis of fundamental long-term economic and financial concentrations. Fixed-income investments use interest rate forecasts and are made in short-duration, high-quality securities.

Malcolm D. Clarke Jr. is chief investment officer; John F. Norris is client contact.

BTR Capital Management

201 California St., Suite 475, San
Francisco, Calif. 94111; (415)
445-8530

Total assets managed	$100,000,000
Discretionary tax-exempt	$45,000,000
401(k)/457 assets managed	$25,000,000
International equity assets	$3,000,000
International fixed-income assets	$1,000,000
Types of accounts managed	CF
Tax-exempt clients	30
Minimum separate account	$1,000,000
No. of portfolio managers	2

BTR Capital Management is an active equity, active fixed-income and balanced manager.

Its equity approach is concept/sector driven, emphasizing quality, value and total return. In fixed income, interest rate anticipation is used.

Lewis H. Katcher is chief investment officer and client contact.

Buffalo Capital Corp.

4350 Von Karman, Suite 490, Newport
Beach, Calif. 92660; (714) 476-2799

Total assets managed	$28,000,000
Discretionary tax-exempt	$28,000,000
International equity assets	$2,000,000
Types of accounts managed	CG
Tax-exempt clients	125
Minimum separate account	$50,000
No. of portfolio managers	3
Size of research staff	1

Buffalo Capital Corp. is an active equity, active fixed-income and tactical asset allocation manager.

The firm specializes in tactical asset allocation, using no-load mutual funds. It attempts to place assets in capital appreciation funds in rising markets and to defensively position assets in money market funds during market downturns.

Mark A. Hoppe is chief investment officer and client contact.

Burgess Capital Corp.

499 Seaport Court, Suite 201,
Redwood City, Calif. 94023; (415)
369-4545

Total assets managed	$292,000,000
Total discretionary assets	$292,000,000
Discretionary tax-exempt	$212,000,000
International equity assets	$117,000,000
International fixed-income assets	$2,000,000
Types of accounts managed	CEF
Tax-exempt clients	19
Minimum separate account	$3,000,000
No. of portfolio managers	3

Burgess Capital Management Corp. is an active domestic and international/global equity, and balanced manager.

Its risk-averse, top-down global approach is based on fundamental analysis of economic, monetary and industry trends worldwide. Holdings are concentrated in 20 to 35 large/medium-cap high-quality issues.

Robert F. Burgess is chief investment officer; Robert F. Osborne is client contact.

Burnham & Co.

202 Federal Square Building, Grand
Rapids, Mich. 49503; (616)
459-1043

Total assets managed	$400,000,000
Total discretionary assets	$400,000,000
Discretionary tax-exempt	$300,000,000
Types of accounts managed	CEFG
Tax-exempt clients	70
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	2

Burnham & Co. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach relies on emerging growth and growth stocks. Its fixed-income approach focuses on interest rate anticipation and sector analysis.

Robert W. Burnham is chief investment officer and client contact.

The Burridge Group Inc.

115 S. LaSalle St., Suite 2880,
Chicago, Ill., 60603; (312) 368-0066

Total assets managed	$260,000,000
Total discretionary assets	$255,000,000
Discretionary tax-exempt	$230,000,000
401(k)/457 assets managed	$2,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	17
Minimum separate account	$3,000,000
No. of portfolio managers	2

The Burridge Group Inc. is an active equity manager.

The firm emphasizes growth stock, using qualitative and quantitative steps to make long-term investments in companies with superior earnings growth.

Richard M. Burridge is chief investment officer; Thomas S. Heath is client contact.

BZW Investment Management Ltd.

P.O. Box 439, Seal House, 1 Swan
Lane, London, EC4R 3UD, U.K.;
01-623-7777

Total assets managed	$29,500,000,000
Total discretionary assets	$27,582,000,000
Discretionary tax-exempt	$108,000,000
International equity assets	$67,000,000
International fixed-income assets	$32,000,000
International cash assets	$9,000,000
Types of accounts managed	C
Tax-exempt clients	1
Minimum separate account	$25,000,000
No. of portfolio managers	139

BZW Investment Management Ltd., an international/global manager, offers balanced, equity, fixed-income, short-term and regional fund accounts.

Its primary equity approach combines quantitative, passive and tactical asset allocation features. The primary fixed-income approach balances interest rates, currency, maturity and quality risk against client objectives. Options and financial futures are used.

Donald Brydon is chief investment officer; Graham Colbourne is client contact.

C

Cabot Cabot & Forbes Realty Advisors Inc.

60 State St., Boston, Mass. 02109,
(617) 722-8200

Total assets managed	$850,000,000
Total discretionary assets	$850,000,000
Discretionary tax-exempt	$850,000,000
Equity real estate assets	$850,000,000
Types of accounts managed	CG
Tax-exempt clients	11
Minimum separate account	$100,000,000

Cabot, Cabot & Forbes Realty Advisors Inc., a real estate manager, provides separate account management of equity real estate portfolios of office and industrial properties.

Ferdinand Colloredo-Mansfeld is chief investment officer; Robert M. Angland is client contact.

Cadence Capital Management Corp.

10 Liberty Square, Boston, Mass.
02109; (617) 451-0250

Total assets managed	$213,000,000
Total discretionary assets	$198,000,000
Discretionary tax-exempt	$183,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	13
Minimum separate account	$5,000,000
No. of portfolio managers	4

Cadence Capital Management Corp. is an active equity manager.

Its equity approach is disciplined and bottom-up, focusing on issues offering a combination of improving fundamentals and favorable valuations. This approach is used for large-cap and small-cap strategies.

David B. Breed is chief investment officer; Jock McQuilkin is client contact.

Cadinha & Co. Inc.

900 Fort Street Mall, Suite 1240,
Honolulu, Hawaii 96813; (808)
523-9488

Total assets managed	$244,000,000
Total discretionary assets	$244,000,000
Discretionary tax-exempt	$195,000,000
Types of accounts managed	CEGU
Tax-exempt clients	127
Minimum separate account	$500,000
No. of portfolio managers	4
Size of research staff	1

Cadinha & Co. Inc. is an active equity and fixed-income and balanced manager.

Its equity approach is based on growth stocks, using fundamental analysis in determining companies' anticipated growth. Its fixed-income approach uses interest rate anticipation, with yield curve analysis determining the proper maturity placement of high-quality debt.

Harlan Cadinha is chief investment officer; Janis Akuna is client contact.

Calamos Asset Management

2001 Spring Road, Suite 750, Oak
Brook, Ill. 60521; (708) 571-7115

Total assets managed	$247,000,000
Total discretionary assets	$247,000,000
Discretionary tax-exempt	$178,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	27
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	3

Calamos Asset Management Inc. specializes in convertible securities.

Using quantitative and statistical measures, the firm evaluates risk/reward for convertible securities with a fundamental bias. Options are used.

John P. Calamos is chief investment officer; Joyce A. Cagnina is client contact.

Calcasieu Marine National Bank

P.O. Box 3403, Lake Charles, La.
70602-3403; (318) 494-3317

Total assets managed	$89,000,000
Total discretionary assets	$89,000,000
Discretionary tax-exempt	$55,000,000
Pooled accounts	$32,000,000
Separate accounts	23,000,000
Tax-exempt clients:	
Commingled	45
Separate	13
Types of accounts managed	CEFU
Minimum separate account	$100,000
No. of portfolio managers	1

Calcasieu Marine National Bank is an active equity, active fixed-income, balanced and short-term manager.

Its primary equity approach is conservative, with emphasis on value, quality and large market capitalization. Its primary fixed income approach is based on interest rate anticipation.

Ben W. Buck is chief investment officer; Fred M. Lee is client contact.

Caldwell & Orkin Inc.

5 Piedmont Center, Suite 417, Atlanta,
Ga. 30305; (404) 239-0707, (800)
237-7073

Total assets managed	$255,000,000
Total discretionary assets	$250,000,000
Discretionary tax-exempt	$108,000,000
401(k)/457 assets managed	$3,000,000
Types of accounts managed	CEF
Tax-exempt clients	18
Minimum separate account	$1,000,000
No. of portfolio managers	3

Caldwell & Orkin Inc. is an active equity and balanced manager.

The firm's investment philosophy combines pattern recognition, rare occurrence and a multifactor decision-making process, resulting in an opportunistic or eclectic style.

Its fixed-income approach uses interest rate anticipation, based on the outlook determined from a multifactor process.

H. Eugene Caldwell is chief investment officer; Fred R. Gruber is client contact.

Cambiar Investors Inc.

8400 E. Prentice Ave., Suite 460,
Englewood, Colo. 80111; (303)
793-3939

Total assets managed	$375,000,000
Total discretionary assets	$375,000,000
Discretionary tax-exempt	$325,000,000
International equity assets	$9,000,000
Types of accounts managed	CFG
Tax-exempt clients	18

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American Appraisal Associates

Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	2

Cambiar Investors Inc., an active equity manager, focuses on growth and low p/e stocks. The firm uses relative valuation screens and fundamental analysis to identify sound companies at positive inflection points for a minimum 50% appreciation potential.

Michael S. Barish is chief investment officer; Wanda Hartgraves is client contact.

Campbell Advisors Inc.

530 Fifth Ave., 20th Floor, New York,
N.Y. 10036; (212) 921-9009

Total assets managed	$548,000,000
Discretionary tax-exempt	$384,000,000
Types of accounts managed	CF
Tax-exempt clients	12
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	2

Campbell Advisors is an active equity and balanced manager.

Its sector rotational equity approach is based on growth and emerging growth stocks. Its fixed-income approach uses interest rate anticipation.

Douglas Campbell Jr. is chief investment officer; Andrew F. Sowers is client contact.

Campbell, Reed, Conner & Birdwell Inc.

11,111 Santa Monica Blvd., 17th
Floor, Los Angeles, Calif. 90025;
(213) 478-4005

Total assets managed	$485,000,000
Total discretionary assets	$485,000,000
Discretionary tax-exempt	$200,000,000
Types of accounts managed	CEF
Tax-exempt clients	27
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	1

Campbell, Reed, Conner & Birdwell Inc. is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach is value-oriented, focuses on growth stock and uses sector rotation. It emphasizes preservation of capital, long-term outlook and fundamental analysis. Holdings are large cap, leaders in their field, have growth greater than the market, and p/e's less than the market.

Its active fixed-income approach relies on interest rate anticipation; emphasis is placed on a high-quality (A rated or better), and shorter maturity securities. Average maturity is six years.

Donn B. Conner is chief investment officer and client contact.

Canagex Investments Ltd.

625 Rene Levesque Blvd. W., Suite
600, Montreal, Quebec H3B 1R2;
(514) 954-3300

Total assets managed	$1,479,000,000
Total discretionary assets	$1,479,000,000
Discretionary tax-exempt	$464,000,000
For subsidiaries of U.S. firms	$32,000,000
Tax-exempt clients	45
U.S. subsidiaries	1
Types of accounts managed	CEFGU
Minimum separate account	$5,000,000
No. of portfolio managers	5
Size of research staff	5

Canagex Investments Ltd., a Canadian firm, is an active equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

Its equity approach is value-oriented, using low p/e and growth stocks. In fixed income, it uses interest rate anticipation and sector analysis.

Marc St. Pierre is chief investment officer; Brian Philbin is client contact.

James Capel Fund Managers

7 Devonshire Square, London EC2M
4HU U.K.; 01-626-0566

Total assets managed	$2,563,000,000
Total discretionary assets	$2,563,000,000
Discretionary tax-exempt	$5,000,000
Types of accounts managed	F
Tax-exempt clients	1
Minimum separate account	$10,000,000
No. of portfolio managers	17

James Capel Fund Managers Ltd. is an active and passive equity, active fixed-income, balanced and active international/global manager.

Its active equity approach is top-down, based on economic fundamentals and relative market values. Stocks are selected on the basis of low p/e and above-average earnings growth.

In fixed income, the firm attempts to enhance returns by maturity and currency bets, by anomaly switching and, when appropriate, by investing in minor markets.

Stephen Lofthouse is chief investment officer. Richard Bisson and Stephen Watson are client contacts.

Capital Advisors Inc.

275 Hess Blvd., Lancaster, Pa. 17601;
(717) 569-4655

Total assets managed	$527,000,000
Discretionary tax-exempt	$527,000,000
401(k)/457 assets managed	$13,000,000
Types of accounts managed	CG
Tax-exempt clients	7
Minimum separate account	$10,000,000
No. of portfolio managers	2

Capital Advisors Inc. is a short-term manager. It emphasizes highly liquid (two- to 10-day), high-quality portfolio structures.

George A. Ominski is chief investment officer; George M. Treffeisen is client contact.

Capital Advisors Inc.

320 S. Boston, Suite 2200, Tulsa,
Okla. 74103; (918) 599-0045

Total assets managed	$350,000,000
Total discretionary assets	$150,000,000
Discretionary tax-exempt	$150,000,000
401(k)/457 assets managed	$13,000,000
Types of accounts managed	CF
Tax-exempt clients	125
Minimum separate account	$250,000
No. of portfolio managers	2
Size of research staff	1

Capital Advisors Inc. is an active and passive equity, active fixed-income and balanced manager.

Its equity approach is top-down, combining growth stock, sector rotation and market-timing strategies. Managers seek to detect trends that provide opportunities or create added risks. Its fixed-income approach uses interest rate anticipation for investing in U.S. government, agency and high-quality corporate obligations. Maturities are staggered between one and 10 years.

Richard E. Minshall is chief investment officer; Jeffrey D. Watkins is client contact.

Capital Consultants Inc.

2300 S.W. First Ave., Portland, Ore.
97201; (503) 241-1200

Total assets managed	$588,000,000
Total discretionary assets	$518,000,000
Discretionary tax-exempt	$448,000,000
401(k)/457 assets managed	$11,000,000
Equity real estate assets	$100,000,000
Mortgage assets	$148,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	79
Minimum separate account	$1,000,000
No. of portfolio managers	7

Capital Consultants Inc. is an active equity, specialty small-cap, active fixed-income, balanced, tactical asset allocation, real estate and short-term manager.

Its equity approach is value-oriented, bottom-up and disciplined. Its fixed-income approach is based on interest rate anticipation, incorporating modest shifts in rate sensitivity and low volatility.

Its real estate approach focuses on properties mainly in the West and on office buildings, industrial properties and assisted-care residential centers.

Gregory J. Houser is chief investment officer; Richard A. Becher is client contact.

Capital Guardian Trust Co.

333 S. Hope St., 52nd Floor, Los
Angeles, Calif. 90071; (213)
486-9200

Total assets managed	$20,941,000,000
Total discretionary assets	$20,513,000,000
Discretionary tax-exempt	$20,439,000,000
Pooled accounts	$2,508,000,000
Separate accounts	$17,931,000,000
401(k)/457 assets managed	$67,000,000
International equity assets	$4,506,000,000
International fixed-income assets	$144,000,000
International cash assets	$358,000,000
Tax-exempt clients:	
Commingled	53
Separate	136
Types of accounts managed	CEFGU
Minimum separate account	$20,000,000
No. of portfolio managers	11
Size of research staff	71

Capital Guardian Trust Co. is an active equity, active fixed-income, balanced, active international/global equity and fixed-income, short-term and convertible manager.

Its equity approach is based on thorough, detailed research and analysis, with an emphasis on value. Its fixed-income approach is two-thirds interest rate anticipation and one-third security selection, again using detailed research and analysis with emphasis on value.

Richard C. Barker is chief investment officer; John H. Seiter is client contact.

Capital Investment Services of America

700 N. Water St., Milwaukee, Wis.
53202; (414) 278-7744

Total assets managed	$575,000,000
Discretionary tax-exempt	$325,000,000
Types of accounts managed	CEFU
Tax-exempt clients	200
Minimum separate account	$500,000
No. of portfolio managers	6
Size of research staff	3

Capital Investment Services of America is an active equity, active fixed-income and balanced manager.

Its equity approach uses fundamental analysis to identify growth and emerging growth stocks. Sector rotation is also used.

For fixed-income, interest rate anticipation and sector analysis are used, emphasizing quality analysis and risk-averse securities.

Clifford T. Nilsen is chief investment officer; William C. Ihlenfeld and William R. Sachse are client contacts.

Capital Research & Management Co.

333 S. Hope St., Los Angeles, Calif.
90071; (213) 486-9200

Total assets managed	$27,200,000,000
Total discretionary assets	$17,400,000,000
Discretionary tax-exempt	$9,800,000,000
401(k)/457 assets managed	$244,000,000
International equity assets	$1,400,000,000
International fixed-income assets	$317,000,000
Types of accounts managed	CEFG
Minimum separate account	$20,000,000
No. of portfolio managers	19
Size of research staff	65

Capital Research & Management Co. is an active equity, active fixed-income, balanced and active international global equity and fixed-income manager.

Its equity approach is fundamental and value-oriented, based on thorough, detailed research and analysis.

Its fixed-income approach is based on interest rate anticipation and maturity, sector and credit analysis.

Jon B. Lovelace is chief investment officer; Benjamin H. Shattuck is client contact.

Capital Strategy Group Ltd.

700 Loews Landmark Office Building,
108 W. Jefferson St., Syracuse,
N.Y. 13202; (315) 471-1547

Total assets managed	$34,000,000
Total discretionary assets	$34,000,000
Discretionary tax-exempt	$25,000,000
Types of accounts managed	C
Tax-exempt clients	80
Minimum separate account	$100,000
No. of portfolio managers	1
Size of research staff	1

Capital Strategy Group Ltd. is an active equity, active fixed-income and balanced manager.

Its primary equity approach is value-oriented, using absolute and relative growth valuation methods as compared to alternative investments with long-term time horizons. Options are used. Its fixed-income approach uses interest rate anticipation, sector analysis and credit analysis/special situation. Managers look for yield pickup in undervalued credit plays.

Christopher H. DeVoe is chief investment officer; Mac E. Cadaret, president, is client contact.

Capital Supervisors Inc.

20 N. Clark St., Suite 700, Chicago, Ill.
60602; (312) 236-8271

Total assets managed	$6,120,000,000
Total discretionary assets	$6,120,000,000
Discretionary tax-exempt	$6,084,000,000
Types of accounts managed	CEFG
Tax-exempt clients	49
Minimum separate account	$1,500,000
No. of portfolio managers	8

Capital Supervisors Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is based on sector rotation. Managers first identify the major market trend, then the sectors that will benefit from economic trends and, finally, attractive securities within the favored sectors.

Its fixed-income approach combines interest rate anticipation and sector analysis. Portfolios are managed to achieve total returns in excess of returns from a buy-and-hold strategy.

A. Lee Thurow is chief investment officer; Theodore R. Tenneman is client contact.

Capital Technology Inc.

P.O. Box 2428, Charlotte, N.C. 28247;
(704) 541-1437

Total assets managed	$286,000,000
Total discretionary assets	$286,000,000
Discretionary tax-exempt	$255,000,000
Types of accounts managed	CEFG
Tax-exempt clients	22
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	1

Capital Technology Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach focuses on very small capitalization, superior growth issues that are selling at low p/es. Its fixed-income approach uses interest rate anticipation, investing in Treasury notes with maturities of less than five years.

Robb Rowe is chief investment officer; Robert Mathai is client contact.

Capital Trust Co.

4380 S.W. Macadam Ave., Suite 450,
Portland, Ore. 97201; (503)
228-2300

Total tax-exempt	$125,000,000
Assigned to other firms	$125,000,000

Capital Trust Co. is a manager of managers offering balanced management through external managers.

The firm has an additional $775 million in nondiscretionary tax-exempt assets managed on its behalf by external advisers.

The equity approach is diversified within five equity funds offered. Manager and equity styles are varied.

The active fixed-income approach uses high-quality credits, with an average duration less than the Shearson Lehman Hutton Government/Corporate Bond Index.

In real estate, two-thirds of the commingled fund is invested in real estate equities, mostly REITS. The balance is invested in Prudential's PRISA.

Ralph C. Rittenour Jr. is chief investment officer; Karen Sheridan is client contact.

Capitalcorp Inc.

655 Montgomery St., San Francisco,
Calif. 94111; (415) 981-4050

Total assets managed	$597,000,000
Total discretionary assets	$570,000,000
Discretionary tax-exempt	$515,000,000
Dedicated/immunized assets	$349,000,000
Types of accounts managed	CU
Tax-exempt clients	9
Minimum separate account	$5,000,000
No. of portfolio managers	7
Size of research staff	3

Capitalcorp Inc. is an active and passive fixed-income, short-term, high-yield and index-plus manager.

Its top-down, fundamental fixed-income approach is based on interest rate anticipation.

James McNiel is chief investment officer; Donald C. De Lutis is client contact.

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Capitoline Investment Services Inc.

919 E. Main St., Richmond, Va.
23219; (804) 782-7222

Total assets managed	$7,286,000,000
Total discretionary assets	$7,286,000,000
Discretionary tax-exempt	$2,711,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	189
Minimum separate account	$2,000,000
No. of portfolio managers	29
Size of research staff	5

Capitoline Investment Services Inc. is an active equity, active fixed-income, balanced, short-term and GIC manager.

Its primary equity approach is opportunistic and changes investment focus based on judgments of relative value.

Its fixed-income approach emphasizes intermediate-term obligations, the maximum average maturity is 10 years. Sector and quality yield spread analysis are used to structure portfolios.

Ernest C. Frohboese is chief investment officer; William E. Heisler is client contact.

Capstone Asset Management Co.

1100 Milam, Suite 3500, Houston,
Texas 77002; (713) 750-8000

Total assets managed	$963,000,000
Total discretionary assets	$963,000,000
Discretionary tax-exempt	$805,000,000
401(k)/457 assets managed	$76,000,000
Equity indexed assets	$536,000,000
Fixed income indexed assets	$259,000,000
Types of accounts managed	CFGU
Tax-exempt clients	7
Minimum separate account	$100,000
No. of portfolio managers	3
Size of research staff	2

Capstone Asset Management Co. is an active and passive equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach is quantitative, using a dividend discount model for stock selection, with a focus on growth stocks. Non-quantitative factors are incorporated into the process. Portfolios are highly diversified.

Its fixed-income approach also is quantitative. Active management seeks to capitalize on market volatility. Capital preservation is stressed.

Dan E. Watson is chief investment officer; Edward L. Jaroski and Sharon K. Stone are client contacts.

Carret and Co. Inc.

560 Lexington Ave., New York, N.Y.
10022; (212) 593-3800

Total assets managed	$487,000,000
Total discretionary assets	$487,000,000
Discretionary tax-exempt	$247,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	44
Minimum separate account	$1,000,000
No. of portfolio managers	10

Carret and Co. Inc. is an active and passive equity, passive fixed-income and balanced manager.

The firm offers two distinct equity styles. The value style focuses on companies with strong balance sheets, hidden assets and low p/es. The growth style focuses on the consumer goods and services sector. Investment characteristics are consistency of sales, earnings and projected earnings growth.

David J. Olderman is chief investment officer; Maarten R. Van Hengel is client contact.

Cashen Investment Advisors

5001 Spring Valley Road, Suite 400
East, Dallas, Texas 75244; (214)
960-9848

Total assets managed	$87,000,000
Total discretionary assets	$87,000,000
Discretionary tax-exempt	$2,000,000
Types of accounts managed	C
Tax-exempt clients	2
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	1

Cashen Investment Advisors Inc. is an active equity, active fixed-income, balanced and short-term manager.

In equities, the firm uses Graham & Dodd analysis, targeting stocks with a history of earnings growth, rising dividends, high profitability, favorable cash flow, low debt and attractive entry price. In fixed income, the firm is a modified sector manager. Portfolios have three common characteristics: moderate to high credit quality, good diversification and an intermediate range.

Shack B. Cashen is chief investment officer and client contact.

Cashman, Farrell and Associates

1235 Westlakes Drive, Berwyn, Pa.
19312; (215) 889-1500

Total assets managed	$2,585,000,000
Total discretionary assets	$2,585,000,000
Discretionary tax-exempt	$2,345,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	51
Minimum separate account	$5,000,000
No. of portfolio managers	8
Size of research staff	5

Cashman, Farrell and Associates is an active equity, active fixed-income and balanced manager.

Its equity approach is value-oriented and opportunistic, targeting out-of-favor stocks of sound companies.

Its fixed-income approach is conservative, avoiding risk and capitalizing on inefficiencies in the markets where they present significant opportunity. Sector and yield curve analysis are used.

Daniel V. Cashman and James H. Farrell Jr. are chief investment officers; Donald J. McBride is client contact.

Cedar Hill Associates Inc.

33 N. LaSalle St., Suite 2600,
Chicago, Ill. 60602; (312) 641-3161

Total assets managed	$187,000,000
Total discretionary assets	$187,000,000
Discretionary tax-exempt	$137,000,000
Types of accounts managed	CFG
Tax-exempt clients	17
Minimum separate account	$1,000,000
No. of portfolio managers	2

Cedar Hill Associates Inc. is an active equity and balanced manager.

Its equity approach seeks to enhance the results of value investing by taking advantage of the effect interest rate changes have on stock returns. The firm uses systematic, quantitative decision-making.

Its fixed-income approach is based on total return, identifying critical turning points in interest rates.

Joel H. Jastromb is chief investment officer; Jeanette Schreiber is client contact.

Central Fidelity Bank

P.O. Box 27602, Richmond, Va.
23261; (804) 697-7010

Total assets managed	$960,000,000
Discretionary tax-exempt	$414,000,000
Pooled accounts	$59,000,000
Separate accounts	$355,000,000
401(k)/457 assets managed	$37,000,000
Tax-exempt clients	399
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	7

Central Fidelity Bank is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach emphasizes companies with a proven record of earnings growth and profitability that are selling at a below average p/e. Its fixed-income approach incorporates an active duration process in which the portfolio duration is adjusted in accordance with the interest rate outlook.

Paul P. Baran is chief investment officer and client contact.

Centre Square Investment Group Inc.

1700 Market St., Suite 1919,
Philadelphia, Pa. 19103; (215)
786-7070

Total assets managed	$898,000,000
Total discretionary assets	$898,000,000
Discretionary tax-exempt	$721,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	40
Minimum separate account	$2,000,000
No. of portfolio managers	3

Centre Square Investment Group Inc. is an active equity, active fixed-income and balanced manager.

The equity approach focuses on high-quality companies with accelerating earnings momentum and potential for market appreciation. The firm packages industry sectors and trades at the margin in core positions to reduce risk.

Fixed-income portfolios ares2 structured to maximize yield and minimize risk within a client's maturity parameters. Portfolios feature higher yield, higher quality and shorter maturity than benchmark indexes.

Donald Carver is chief investment officer; Charles Coqueron is client contact.

Certus Financial Corp.

4 Embarcadero Center, Suite 2850,
San Francisco, Calif. 94111; (415)
954-5445

Total assets managed	$2,400,000,000
Total discretionary assets	$2,400,000,000
Discretionary tax-exempt	$2,400,000,000
401(k)/457 assets managed	$2,400,000,000
Types of accounts managed	CG
Tax-exempt clients	32
Minimum separate account	$20,000,000
Size of research staff	3

Certus Financial Corp. is a short-term and GIC/BIC manager.

The firm applies active management techniques to GIC/BIC portfolios.

David M. Perry is chief investment officer; Bruce D. Simon is client contact.

Chancellor Capital Management

153 E. 53rd St., New York, N.Y.
10022; (212) 891-6500

Total assets managed	$18,726,000,000
Total discretionary assets	$18,610,000,000
Discretionary tax-exempt	$14,535,000
401(k)/457 assets managed	$4,578,000,000
Equity indexed assets	$1,400,000,000
Fixed-income indexed assets	$115,000,000
Dedicated/immunized assets	$85,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	240
Minimum separate account	$10,000,000
No. of portfolio managers	32
Size of research staff	20

Chancellor Capital Management is an active and passive equity, active and passive fixed-income, balanced, tactical asset allocation, short-term and venture capital manager.

In equities, the firm seeks growth companies with positive fundamental change and compelling values, with input from its investment technology group. Its primary fixed-income approach is equally driven by interest rate anticipation and sector rotation, which seek to provide superior absolute and relative rates of return consistent with client objectives.

Robert G. Wade is chief investment officer; Joseph W. Haley is client contact.

Chase Investment Counsel

300 Preston Ave., Suite 403,
Charlottesville, Va. 22901; (804)
293-9104

Total assets managed	$223,000,000
Total discretionary assets	$223,000,000
Discretionary tax-exempt	$156,000,000
Types of accounts managed	CEFU
Tax-exempt clients	10
Minimum separate account	$3,000,000
No. of portfolio managers	2
Size of research staff	2

Chase Investment Counsel Corp. is an active equity, active fixed-income and balanced manager.

Its equity approach stresses undervalued, low p/e and growth stocks with good continuity of earnings and intermediate market capitalization. Its fixed-income approach uses interest rate anticipation with a short- to intermediate-term orientation.

Derwood S. Chase Jr. is chief investment officer and client contact.

Chase Investors Management Corp.

1211 Avenue of the Americas, New
York, N.Y. 10036; (212) 730-4241

Total assets managed	$33,628,000,000
Total discretionary assets	$27,749,000,000
Discretionary tax-exempt	$16,604,000,000
401(k)/457 assets managed	$220,000,000
Equity real estate assets	$130,000,000
Mortgage assets	$202,000,000
International equity assets	$1,353,000,000
International fixed-income assets	$38,000,000
International cash assets	$225,000,000
Equity indexed assets	$2,955,000,000
Fixed-income indexed assets	$531,000,000
Dedicated/immunized assets	$1,638,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	128
Minimum separate account	$10,000,000
No. of portfolio managers	43

Chase Investors Management Corp. is an active and passive equity, active and passive fixed-income, balanced, tactical asset allocation, real estate, active and passive international/global, short-term, currency and oil and gas manager.

Its equity approaches include passive, growth, emerging growth, market timing/tactical asset allocation and value. The firm offers a full spectrum of growth equities and small-cap value equities programs.

Its primary fixed-income approach focuses on identifying undervalued bonds in particular sectors.

Its real estate approach emphasizes acquisitions and active management of U.S. income-producing properties.

Michael L. Schonberg is chief investment officer; Howard A. Scribner is client contact.

Chelsea Management Co.

888 W. Sixth St., Suite 1400, Los
Angeles, Calif. 90017; (213)
362-9200

Total assets managed	$525,000,000
Total discretionary assets	$525,000,000
Discretionary tax-exempt	$269,000,000
Mortgage assets	$35,000,000
International equity assets	$1,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	51
Minimum separate account	$1,000,000
No. of portfolio managers	5
Size of research staff	2

Chelsea Management Co. is an active equity, active fixed-income and balanced manager.

Its primary equity approach emphasizes low p/e and large-cap stocks, using sector rotation and market timing/tactical asset allocation.

Its primary fixed-income approach uses interest rate anticipation and trends.

Frederick J. Ruopp is chief investment officer; Dale K. Longacre is client contact.

Chemical Investment Group

30 Rockefeller Plaza, 59th Floor, New
York, N.Y. 10112; (212) 621-2048

Total assets managed	$10,339,000,000
Total discretionary assets	$7,527,000,000
Total discretionary tax-exempt	$5,621,000,000
No. of portfolio managers	21

The Chemical Investment Group of advisory firms provides equity, fixed-income, international/global and money market management.

The parent is Chemical Banking Corp. Kenneth L. Dowd is chief executive officer; Edward E. Madden is the client contact.

The assets of the following subsidiaries are included here:

- The Chemical Investment Group Ltd. manages $4.241 billion in U.S. tax-exempt assets in active fixed-income and short-term accounts.

The firm's investment approach is bottom-up, addressing the benchmark as a liability schedule and applying a disciplined approach to spread maximization to add value.

Alexander Laird is chief investment officer; Edward E. Madden is client contact.

25 largest insurers

Firm	$ mils.*
Prudential	97,664
Equitable	88,580
Metropolitan Life	61,632
Aetna Life	44,985
The New England	34,532
Travelers	27,971
Pacific Financial	27,653
CIGNA	26,798
John Hancock	21,377
The Principal	18,605
New York Life	17,940
Transamerica	15,791
USF&G (Axe, Chancellor)	15,658
Massachusetts Mutual	12,467
Lincoln Nat'l	8,273
Marsh/McLennan (Putnam)	7,157
Great-West Life	7,023
MONY	6,912
Provident Nat'l	6,651
Liberty Mutual (Stein Roe)	6,306
Mutual Benefit Life	6,120
Continental Assurance	5,584
Nationwide Life	5,552
Mutual of America	4,986
Hartford Life	4,500
Total	**580,717**

*Discretionary, tax-exempt assets, including subsidiaries

- Chemical Investment Group Inc. — Chicago, an active equity and balanced manager, manages $1.263 billion in tax-exempt assets.

Its real income growth approach emphasizes an income orientation based on a growing stream of dividends. Its diversified growth approach concentrates on earnings momentum with value examination.

Jan B. Persson is president; Marisa C. Newman is client contact.

- Chemical Investment Group (London) Ltd., an active international equity manager, manages $117 million in tax-exempt assets.

It offers three products: Europe 1992 Fund, emphasizing small-cap European stocks; Europe Regional Management, using a value discipline with a universe consisting of European stocks with total capitalization in excess of $500 million; and the International Equity Investment Fund, which invests in equities from Japan, the United Kingdom, continental Europe and the Pacific Basin.

James Tonner is chief investment officer; Louise Grey is client contact.

- Chemical Trust & Banking Co. Ltd. (Japan), an active Japanese equity manager, manages $3.198 billion in total assets. It identifies and weights attractive market sectors and stocks expected to benefit from trends in the Japanese economy.

Yasushi Matsumoto is chief investment officer; Yoshio Tokuyama is client contact.

Chemical Investment Group Inc.-Chicago

10 S. LaSalle, Chicago, Ill. 60603;
(312) 220-7550

See entry for the CHEMICAL INVESTMENT GROUP.

Chemical Investment Group Ltd.

30 Rockefeller Plaza, 59th Floor, New
York, N.Y. 10012; (212) 621-2048

See entry for CHEMICAL INVESTMENT GROUP.

Chemical Investment Group (London) Ltd.

180 Strand, London WC2R 1EX U.K.;
01-380-5111

See entry for the CHEMICAL INVESTMENT GROUP.

Chemical Trust & Banking Co. Ltd. (Japan)

3-4 Marunouchi, 2-chome,
Chiyoda-Ku, Tokyo 100, Japan;
03-214-9590

See entry for the CHEMICAL INVESTMENT GROUP.

The Chicago Corp.

208 S. LaSalle St., Chicago, Ill. 60604;
(312) 855-5985

Total assets managed	$1,468,000,000
Total discretionary assets	$1,468,000,000
Discretionary tax-exempt	$1,174,000,000
401(k)/457 assets managed	$5,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	95
Minimum separate account	$1,000,000
No. of portfolio managers	6
Size of research staff	12

The Chicago Corp. is an active equity, active fixed-income and balanced manager.

Its primary equity approach stresses stocks with consistent growth over an economic cycle that sell at undervalued multiples. Its primary fixed-income approach uses interest rate anticipation. Long bonds are bought when interest rates are declining.

Jon Ender is chief investment officer; Charles Klimkowski is client contact.

Chicago Asset Management

11 S. LaSalle St., Suite 2800,
Chicago, Ill. 60603; (312) 372-7469

Total assets managed	$709,000,000
Total discretionary assets	$709,000,000
Discretionary tax-exempt	$709,000,000
Types of accounts managed	CU
Tax-exempt clients	29
Minimum separate account	$15,000,000
No. of portfolio managers	4

Chicago Asset Management is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is value oriented, bottom-up and contrarian, distinguished by a "rebalancing" technique. Its fixed-income approach is predicated on a controlled risk strategy that reduces dependence on interest rate anticipation, while emphasizing value added through sector rotation and yield curve analysis.

Jon F. Holsteen, president, is chief investment officer and client contact.

Chicago Title & Trust Co.-Investment Management

111 W. Washington St., Chicago, Ill.
60602; (312) 630-2868

Total assets managed	$3,226,000,000
Total discretionary assets	$2,551,000,000
Discretionary tax-exempt	$1,238,000,000
Pooled accounts	$501,000,000
Separate accounts	$737,000,000
401(k)/457 assets managed	$323,000,000
Tax-exempt clients:	
Commingled	206
Separate	27
Types of accounts managed	CEFU
Minimum separate account	$5,000,000
No. of portfolio managers	13
Size of research staff	5

Chicago Title & Trust Co.-Investment Management is an active equity, active fixed-income, balanced, short-term and GIC manager.

Its primary equity approach is quantitative, emphasizing bottom-up, long-term value stock selection. The firm concentrates on security analysis.

Its primary fixed-income approach emphasizes management toward a market reference point to enhance returns via security and sector swapping and credit analysis.

A. Vincent Agnew is chief investment officer; Daniel R. Joyce is client contact.

Chrysalis Investments Inc.

124 Mount Auburn St., Suite 200,
Cambridge, Mass. 02138; (617)
576-5727

Total assets managed	$1,000,000
Total discretionary assets	1,000,000
Discretionary tax-exempt	$0
No. of portfolio managers	1

Chrysalis Investments Inc., an equity manager, uses growth stocks, market timing and quantitative techniques. Its valuation model systematically defines efficient and inefficient pricing components.

Dean L. Jacoby is chief investment officer; Richard E. Murray is client contact.

Churchill Management Corp.

5900 Wilshire Blvd., Los Angeles,
Calif. 90036; (213) 937-7110

Total assets managed	$180,000,000
Total discretionary assets	$180,000,000
Discretionary tax-exempt	$95,000,000
Equity real estate assets	$6,000,000
Mortgage assets	$10,000,000
Types of accounts managed	CEU
Tax-exempt clients	50
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	4

Churchill Management Corp. is an active equity, passive fixed-income, balanced and real estate manager.

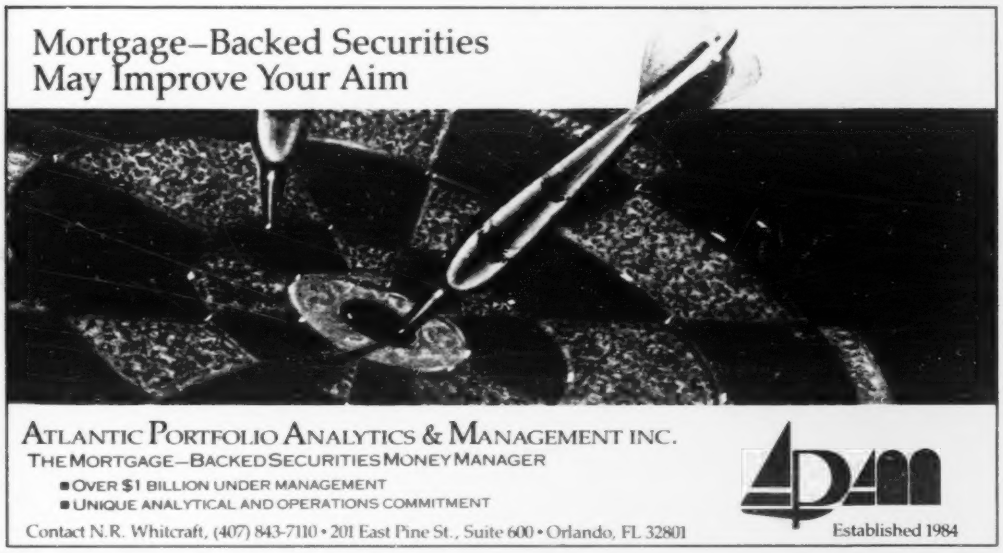
Its equity approach combines growth and low p/e stocks and market timing. Its fixed-income approach bases maturity lengths on intermediate-term forecasts. Its real estate approach is to establish limited partnerships of high-quality investments using non-leveraged properties.

Fred A. Fern is chief investment officer; Steven P. Mann is client contact.

CIGNA Asset Advisers Inc.

Hartford, Conn. 06152; (203)
726-6000

Total assets managed	$50,913,000,000
Total discretionary assets	$29,961,000,000
Discretionary tax-exempt	$26,798,000,000
Pooled accounts	$4,252,000,000
Separate accounts	$3,376,000,000
GICs	$1,087,000,000
Annuities	$1,224,000,000
Other	$16,859,000,000
401(k)/457 assets managed	$4,000,000,000
Equity real estate assets	$2,232,000,000
Mortgage assets	$10,233,000,000
International equity assets	$228,000,000
Equity indexed assets	$217,000,000
Fixed-income indexed assets	$30,000,000
Dedicated/immunized assets	$3,403,000,000
Tax-exempt clients:	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Contact N.R. Whitcraft, (407) 843-7110 • 201 East Pine St., Suite 600 • Orlando, FL 32801

APAM
Established 1984

Pooled	650
Separate	22
Types of accounts managed	CEFGU
Minimum separate equity account	$10,000,000
Minimum separate bond account	$20,000,000
No. of portfolio managers	35
Size of research staff	21

CIGNA Asset Advisors Inc. is an active and passive equity, active and passive fixed-income, balanced, tactical asset allocation, real estate, active international equity, short-term and high-yield manager.

Its domestic equity approach is value-oriented, balancing earnings growth and value. Research-based fundamental analysis identifies stocks with superior value and return potential over the long term. Stock index futures are used in the commingled stock index fund. Options also are used.

Its primary fixed-income approach is cyclical anticipation of interest rates. The firm does not attempt to capture minor fluctuations, but rather major interest rate movements over full economic cycles.

The real estate approach focuses on opportunities created by property life cycles. Diversified and specialized investments are structured to take advantage of risk and return tradeoffs.

George H. Trumbull is chief investment officer; William F. Chapman III is client contact.

The assets of these subsidiaries are included in the listing above:

- CIGNA International Investment Advisors Ltd., London, manages $228 million in tax-exempt assets for U.S. clients. Its equity approach is top-down, actively allocating assets to countries and sectors based on their macroeconomic outlook. Very liquid, high-quality stocks are selected for competitive returns with low volatility profile. Currency is an important consideration in determining the country and cash allocations used. Country weightings may vary significantly from those of the EAFE.

Its fixed-income approach is also top down and geographic. Horizon analysis is used to determine maturity and durations. Active currency management is employed.

William E. Chapman III is the client contact.

- Connecticut General Pension Services Inc. provides asset allocation services, managing more than $3 billion in tax-exempt assets.

Asset/liability analysis, modern portfolio theory and risk tolerances are considered in designing diversified, long-term strategies.

Rosemary S. Cleaves is client contact.

CIGNA International Investment Advisors Ltd.

c/o CIGNA Asset Advisers Inc.,
Hartford, Conn. 06152; (203)
726-6241

See entry for CIGNA ASSET ADVISERS INC.

CIMG Inc.

P.O. Box 17500, Milwaukee, Wis.
53217; (414) 241-4575

Total assets managed	$133,000,000
Total discretionary assets	$133,000,000
Discretionary tax-exempt	$72,000,000
401(k)/457 assets managed	$1,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	85
Minimum separate account	$250,000
No. of portfolio managers	3
Size of research staff	1

CIMG Inc. is an active fixed-income and balanced manager.

Its primary equity approach uses sector rotation and market timing/tactical asset allocation. Equities are concentrated in market sectors benefiting from the current market cycle. Its fixed income approach uses interest rate anticipation in government securities. Average maturities range from two to 25 years.

Louis T. Chambers is chief investment officer and client contact.

Cisneros Asset Management

205 N. Presa St., Suite 200, San
Antonio, Texas 78205; (512)
227-5200

Total assets managed	$44,000,000
Total discretionary assets	$44,000,000
Discretionary tax-exempt	$44,000,000
Types of accounts managed	G
Tax-exempt clients	2
Minimum separate account	$15,000,000
No. of portfolio managers	1

Cisneros Asset Management Co. is an active fixed-income manager.

Its primary approach involves interest rate anticipation and sector analysis. Emphasis is on total rate of return.

Narciso Cano is chief investment officer; Victor Miramontes is client contact.

Citicorp Investment Management

153 E. 53rd St., 22nd Floor, New York,
N.Y. 10043; (212) 559-9140

Total assets managed	$22,902,000,000
Total discretionary assets	$17,034,000,000
Discretionary tax-exempt	$394,000,000
International equity assets	$337,000,000
International fixed-income assets	$20,000,000
International cash assets	$37,000,000
Types of accounts managed	CG
Tax-exempt clients	12
Minimum separate account	$10,000,000
No. of portfolio managers	41
Size of research staff	4

Citicorp Investment Management is an active international/global equity, fixed-income and short-term manager.

In equities, it combines a centralized global asset allocation process with securities selected by local portfolio managers in each of the major financial markets.

The fixed-income approach follows a centralized country allocation process with a heavy emphasis on currency and duration management.

Anthony Watson is chief investment officer; Carolyn A. Peoples is client contact.

Citizens Fidelity Capital Management Co.

500 W. Jefferson St., Louisville, Ky.
40296; (502) 581-3943

Total assets managed	$5,200,000,000
Total discretionary assets	$3,006,000,000
Discretionary tax-exempt	$1,040,000,000

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: Government
U: Union

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The offer is made only by the Prospectus.

New Issue / April 30, 1990

$1,100,000,000

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Price 100% and accrued interest from May 1, 1990

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Goldman, Sachs & Co. Shearson Lehman Hutton Inc.
Chase Securities, Inc. Daiwa Securities America Inc. Dillon, Read & Co. Inc.
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PaineWebber Incorporated Prudential-Bache Capital Funding
Dean Witter Reynolds Inc. Yamaichi International (America), Inc.
The Chapman Co. CL GlobalPartners Securities Corporation

401(k)/457 assets managed	$110,000,000
Equity indexed assets	$25,000,000
Types of accounts managed	CEFG
Tax-exempt clients	780
Minimum separate account	$250,000
No. of portfolio managers	15
Size of research staff	6

Citizens Fidelity Capital Management Co. is an active and passive equity, active and passive fixed-income, balanced and short-term manager.

Its primary equity approach relies on value, not only low p/e, but also earnings growth. Asset allocation, but not market timing, is used. In fixed-income, sector analysis is used; maturities don't exceed 10 years.

Ronald J. Murphy is chief investment officer; Robert T. Goetz is client contact.

Citizens and Southern Corp.

Atlanta, Ga. 30303; (404) 581-2121

Total assets managed	$25,428,000,000
Total discretionary assets	$10,504,000,000
Discretionary tax-exempt	$6,759,000,000
Pooled accounts	$344,000,000
Separate accounts	$6,415,000,000
Real estate equity assets	$12,000,000
International equity assets	$8,000,000
Equity indexed assets	$17,000,000
Dedicated/immunized assets	$12,000,000
No. of portfolio managers	22
Size of research staff	6

Citizens and Southern Corp., through its subsidiaries, provides active equity, active fixed-income, balanced, real estate, global equity and short-term management.

The figures above reflect the assets of the following subsidiaries.

- Citizens and Southern Trust Co. Inc. delivers focused investment management through three subsidiaries: Citizens and Southern Trust Co. (Florida), Citizens and Southern Trust Co. (Georgia), and Citizens and Southern Trust Co. (South Carolina).

The primary equity approach is bottom-up, identifying value by low p/e, higher yielding stocks with positive earnings and price momentum.

The primary fixed-income approach uses yield curve analysis and targets bonds with a minimum rating of A and a maximum average maturity of 10 years.

The real estate approach focuses on high-grade commercial properties in the Southeast that are capable of producing attractive cash returns, and that have lease structures with potential rental increases and expense stops.

The chief investment officers are Vernon B. Gayne Jr. in Florida, Bruce L. Laser in Georgia and William D. Verner in South Carolina; Dan Davis, in Atlanta, is the client contact at (404) 897-3081.

- C&S Investment Advisors Inc.'s active equity approach is value-oriented, focusing on low p/e stocks, earnings momentum and positive surprise.

Its primary fixed-income approach uses sector and technical analysis.

James L. Kermes is chief investment officer; K. David Wheeler is client contact.

Citizens and Southern Trust

33 North Ave., Atlanta, Ga. 30302;
(404) 897-3081

See entry for CITIZENS AND SOUTHERN CORP.

Citizens and Southern Trust Co. (Florida) Inc.

P.O. Box 13388, St. Petersburg, Fla.
33733; (813) 821-8111

See entry for CITIZENS AND SOUTHERN CORP.

Citizens and Southern Trust Co. (South Carolina) Inc.

1901 Main St., Columbia, S.C. 29201;
(803) 343-7737

See entry for CITIZENS AND SOUTHERN TRUST CORP.

City National Bank

120 S. Spalding Drive, Beverly Hills,
Calif. 90213; (213) 550-5663

Total assets managed	$2,158,000,000
Total discretionary assets	$610,000,000
Discretionary tax-exempt	$173,000,000
Separate accounts	$173,000,000
Tax-exempt clients	175
Types of accounts managed	C
Minimum separate account	$250,000
No. of portfolio managers	2
Size of research staff	2

City National Bank is an active and passive equity, active and passive fixed-income, balanced and short-term manager.

Its primary equity approach uses a Graham & Dodd value orientation, seeking stocks with favorable fundamentals and that are undervalued relative to their underlying asset base and future earnings potential.

Its primary fixed-income approach emphasizes short to intermediate securities. Assets are placed where the yield curve provides the greatest return within those time parameters. Options are used.

Jerry Clebanoff is chief investment officer; Mr. Clebanoff and Vito Gioiello are client contacts.

Citytrust

961 Main St., Bridgeport, Conn.
06601; (203) 384-5852

Total assets managed	$1,472,000,000
Total discretionary assets	$1,172,000,000
Discretionary tax-exempt	$370,000,000
Pooled accounts	$300,000,000
Separate accounts	$70,000,000
401(k)/457 assets managed	$38,000,000
Tax-exempt clients	
Commingled	350
Separate	25
Types of accounts managed	CEFGU
Minimum separate account	$1,000,000
No. of portfolio managers	7

Citytrust is an active equity, active fixed-income, balanced and short-term manager.

Its top-down, value-oriented equity approach uses sector rotation and market timing/tactical asset allocation. Its top-down, quality-oriented fixed-income approach emphasizes interest rate anticipation and sector analysis.

Roger L. Perry is chief investment officer; James T. Mills is client contact.

Clean Yield Asset Management Inc.

224 State St., Portsmouth, N.H.
03801; (603) 436-0820

Total assets managed	$5,000,000
Total discretionary assets	$5,000,000
Discretionary tax-exempt	$60,000
Types of accounts managed	F
Tax-exempt clients	1
Minimum separate account	$150,000
No. of portfolio managers	3

Clean Yield Asset Management Inc. is an active equity manager that specializes in socially responsible investing. Investments are based on fundamentals, with technical analysis used to assist in buy/sell decisions.

Benjamin Lovell is chief investment officer and client contact.

The Clifton Group

309 Clifton Ave., Minneapolis, Minn.
55403; (612) 870-8800

Total assets managed	$160,000,000
Total discretionary assets	$160,000,000
Discretionary tax-exempt	$140,000,000
Types of accounts managed	CFU
Tax-exempt clients	22
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	1

The Clifton Group, formerly Kiene Wooters & Associates, is a passive equity, passive fixed-income, balanced and futures and options manager.

Portfolios are customized through combinations of equity and/or fixed-income, cash and synthetic/enhanced index products and/or futures and options use to add return and project underlying indexed or outside actively managed assets.

Jack J. Hansen and Richard Ballsrud are chief investment officers; Kevin B. Erdman is client contact.

CMB Investment Counselors

1880 Century Park East, Suite 600,
Los Angeles, Calif. 90067; (213)
557-1500

Total assets managed	$3,201,000,000
Total discretionary assets	$3,179,000,000
Discretionary tax-exempt	$1,034,000,000
Types of accounts managed	CFU
Tax-exempt clients	18
Minimum separate account	$10,000,000
No. of portfolio managers	5
Size of research staff	4

CMB Investment Counselors is an active equity, active fixed-income and balanced manager.

Its primary equity approach is growth stock and value based. It seeks good relative value among stocks with strong sales and earnings momentum across six categories: major growth, moderate growth, developing growth, credit cyclical, cyclical value and asset value. Its fixed-income approach is value oriented, using sector analysis to find broad areas of undervaluation among government, corporate and mortgage pass-through securities.

Thomas J. Steffanci is chief investment officer; Gordon C. Coomans is client contact.

Coen & Densmore Inc.

109½ Church St., Charleston, S.C.
29401; (803) 577-7783

Total assets managed	$125,000,000
Total discretionary assets	$125,000,000
Discretionary tax-exempt	$100,000,000
Types of accounts managed	CEF
Tax-exempt clients	15
Minimum separate account	$5,000,000
No. of portfolio managers	2

Coen & Densmore Inc., an active equity and balanced manager, is value-oriented, focusing on growth and emerging growth stocks. It seeks companies in strong industry groups with high relative strength and accelerating earnings. Its fixed-income approach relies on interest rate anticipation.

Richard Coen and Richard Densmore are chief investment officers and client contacts.

Cohen & Steers Capital Management Inc.

757 Third Ave., New York, N.Y. 10017;
(212) 832-3232

Total assets managed	$216,000,000
Total discretionary assets	$216,000,000
Discretionary tax-exempt	$143,000,000
Types of accounts managed	CEG
Tax-exempt clients	5
Minimum separate account	$10,000,000
No. of portfolio managers	3
Size of research staff	1

Cohen & Steers Capital Management Inc. is a real estate securities manager. It buys real estate securities for a premium yield and assets at a discount.

Martin Cohen is chief investment officer and client contact.

Coldwell Banker Commercial Realty Advisors

533 Fremont Ave., Los Angeles, Calif.
90071; (213) 613-3491

Total assets managed	$968,000,000
Total discretionary assets	$732,000,000
Discretionary tax-exempt	$732,000,000
Equity real estate assets	$622,000,000
Mortgage assets	$37,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	44
Minimum separate account	$15,000,000
No. of portfolio managers	9
Size of research staff	5

Coldwell Banker Commercial Realty Advisors, a real estate manager, seeks to maximize asset value through aggressive management and timely disposition.

Tad W. Jones is chief investment officer; Robert W. Morris is client contact.

Collins Associates

840 Newport Center Drive, Suite 660,
Newport Beach, Calif. 92660; (714)
644-5771

Total assets managed	$40,000,000,000
Assigned to other firms	$40,000,000,000
No. of portfolio managers	3
Size of research staff	5

Collins Associates, a manager of managers, has $40 billion in total assets under management on its behalf by external managers in equity, fixed-income, balanced, international, real estate and GIC management.

Budge Collins, president, is chief investment officer and client contact.

Colorado Capital Advisors

950 17th St., Suite 2450, Denver,
Colo. 80202; (303) 892-4235

Total assets managed	$3,465,000,000
Total discretionary assets	$1,085,000,000
Discretionary tax-exempt	$553,000,000
401(k)/457 assets managed	$50,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	115
Minimum separate account	$2,000,000
No. of portfolio managers	9

Colorado Capital Advisors is an active equity, active fixed-income, balanced and short-term manager.

Its primary equity approach is yield and value oriented, using Graham & Dodd analysis.

Its primary fixed-income approach is based on sector analysis. The firm does a historical spread analysis to swap from rich to cheap sectors.

Robert J. Alder is chief investment officer; Coleman R. Robinson is client contact.

Columbia Management Co.

1300 S.W. Sixth Ave., P.O. Box 1350,
Portland, Ore. 97207; (503)
222-3600

Total assets managed	$7,248,000,000
Total discretionary assets	$5,133,000,000
Discretionary tax-exempt	$5,133,000,000
401(k)/457 assets managed	$297,000,000
Dedicated/immunized assets	$127,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	79
Minimum separate account	$20,000,000
No. of portfolio managers	12

Columbia Management Co. is an active equity, active fixed-income and balanced manager.

Its primary top-down equity approach is value oriented and uses sector rotation. Its fixed-income strategy, involving sector analysis, focuses on structuring and actively managing high-quality intermediate-term portfolios with an emphasis on mortgage-backed/asset-backed securities.

James F. Rippey is chief investment officer; Stephen C. Haas is client contact.

Columbus Bank & Trust Co.

P.O. Box 120, Columbus, Ga. 31902;
(404) 649-2433

Total assets managed	$613,000,000
Total discretionary assets	$613,000,000
Discretionary tax-exempt	$153,000,000
Pooled accounts	$64,000,000
Separate accounts	$89,000,000
401(k)/457 assets managed	$6,000,000
Mortgage assets	$8,000,000
Tax-exempt clients:	
Commingled	243
Separate	14
Types of accounts managed	CEFG
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	1

Columbus Bank & Trust Co. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach stresses undervalued growth potential, strong cash flow and low relative p/es with a bias toward high-quality, large and midsize companies. In fixed income, it uses intermediate maturities and limited duration adjustment, and sector and yield-curve analysis.

Danny Hobbs is chief investment officer; Joseph Lowery is client contact.

Columbus Circle Investors

Metro Center, 1 Station Place,
Stamford, Conn. 06902; (203)
353-6000

Total assets managed	$3,720,000,000
Total discretionary assets	$3,720,000,000
Discretionary tax-exempt	$2,100,000,000
401(k)/457 assets managed	$5,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	77
Minimum separate account	$10,000,000
No. of portfolio managers	3
Size of research staff	9

Columbus Circle Investors is an active equity, active fixed-income and balanced manager.

Its primary equity approach uses growth stocks and sector rotation. It seeks companies whose essential story elements are exceeding expectations and demonstrating positive momentum and surprise. Its primary fixed-income approach uses interest rate anticipation and sector analysis, focusing on factors affecting maturity and quality.

Irwin F. Smith is chief investment officer; Robert W. Fehrmann and Winthrop S. Headley are client contacts.

Comerica Capital Management Inc.

211 W. Fort, Detroit, Mich.
48275-1032; (313) 222-5056

Total assets managed	$6,071,000,000
Total discretionary assets	$6,071,000,000
Discretionary tax-exempt	$2,752,000,000
401(k)/457 assets managed	$210,000,000
International fixed-income assets	$100,000,000
Equity indexed assets	$36,000,000
Types of accounts managed	CEFGU
Minimum separate account	$5,000,000
No. of portfolio managers	22
Size of research staff	10

Comerica Capital Management Inc. is an active and passive equity, active fixed-income, balanced, active international/global equity, short-term cash and pooled GIC manager.

Its equity approach emphasizes growth stocks demonstrating earnings momentum, rising earnings estimates and positive earnings surprises.

Its fixed-income approach uses sector analysis and arbitrage. Yield spreads are analyzed to separate market inefficiencies from long-term shifts. Tactical trading exploits market inefficiencies through arbitrage swaps.

George Eshelman is chief investment officer; Robert Kay is client contact.

Commerce Bank-Investment Management & Trust Services

922 Walnut, Kansas City, Mo. 64106;
(816) 234-2506

Total assets managed	$2,492,000,000
Total discretionary assets	$2,492,000,000
Discretionary tax-exempt	$903,000,000
Pooled accounts	$286,000,000
Separate accounts	$617,000,000
401(k)/457 assets managed	$160,000,000
Tax-exempt clients:	
Commingled	287
Separate	292
Types of accounts managed	CEFGU
Minimum separate account	$1,000,000
No. of portfolio managers	17

Commerce Bank — Investment Management & Trust Services is an active equity, active fixed-income, balanced, tactical asset allocation, short-term and GIC manager.

Its equity approach emphasizes companies with above average return on equity, earnings and dividend growth; strong financials; and innovative management. These core holdings are combined with stocks representing exceptional opportunities.

Its fixed-income approach is systematic, disciplined and consistent. It is quantitative and uses no forecasting.

Peter Mackie is chief investment officer; George H. Wood is client contact.

Commercial Capital Management

400 W. Capitol, Little Rock, Ark.
72201; (501) 371-6756

Total assets managed	$1,500,000,000
Total discretionary assets	$400,000,000
Discretionary tax-exempt	$125,000,000
401(k)/457 assets managed	$22,000,000
Equity real estate	$3,000,000
Types of accounts managed	CEFG
Tax-exempt clients	375
Minimum separate account	$500,000
No. of portfolio managers	2

Commercial Capital Management is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach is top-down, with stocks selected based on certain growth and valuation criteria. In fixed income, its economic and interest rate outlooks determine the average maturity, which can range from two to 10 years.

Mary Sue Jacobs is chief investment officer and client contact.

International/global advisers will be profiled June 25.

Commerz International Capital Management GmbH

Kettenhofweg 22, 6000 Frankfurt/Main
1, West Germany; 49-69-719122-0

Total assets managed	$1,900,000,000
Total discretionary assets	$1,512,,000,000
Discretionary tax-exempt	$0
Minimum separate account	$10,000,000
No. of portfolio managers	9
Size of research staff	5

Commerz International Capital Management GmbH manages equity, fixed-income and balanced portfolios on a country-by-country, regional, international or global basis. Currency decisions are separate from country allocations.

Its top-down active equity approach uses country over- or underweightings, as well as sector rotation based on relative strength criteria; indexed management is offered.

Its fixed-income approach is based on interest rate anticipation, using a top-down approach for country allocation and a quantitative approach for maturity selection.

Heinz Hockmann is chief investment officer; Robert Hock is client contact.

The Common Fund

P.O. Box 940, 363 Reef Road,
Fairfield, Conn. 06430; (203)
254-1211

The Common Fund is a manager of managers; $10 billion is managed on its behalf by external investment managers.

Equity, fixed-income, balanced and international management is offered through the external managers.

Its equity approach employs commingled programs that use multiple investment techniques, including emerging growth, growth and low p/e stocks, Graham & Dodd and quantitative analysis, market timing and country selection.

Fixed-income approaches include interest rate anticipation, sector analysis and country selection.

George Keane is chief investment officer; David Storrs is client contact.

Compass Technology Partners

3301 El Camino Real, Atherton, Calif.
94027; (415) 366-7595

Total assets managed	$0
Minimum separate account	$5,000,000
No. of portfolio managers	2

Compass Technology Partners, a venture capital manager, invests in small-capitalization technology firms. It uses a proprietary analytical model to identify attractive electronics-related markets and potential investments.

David G. Arscott is chief investment officer and client contact.

Composite Research & Management Co.

1000 Second Ave., Suite 2800,
Seattle, Wash. 98104; (206)
461-3800

Total assets managed	$1,196,000,000
Total discretionary assets	$1,196,000,000
Discretionary tax-exempt	$165,000,000
401(k)/457 assets managed	$35,000,000
Types of accounts managed	CEFU
Tax-exempt clients	35
Minimum separate account	$5,000,000
No. of portfolio managers	5

Composite Research & Management Co. is an active and passive equity, active fixed-income, balanced and short-term manager.

Its equity approach focuses on intrinsic value, confined to high-quality low p/e stocks. The bottom-up, fundamental research process looks for companies with net free cash flow, low debt leverage and above-average return on capital. Its fixed-income approach emphasizes sector analysis and credit quality.

Kenneth E. Carlson is client contact.

Computime Institutional Services Inc.

26 W. Ninth St., New York, N.Y.
10011; (212) 777-9494

Total assets managed	$32,000,000
Total discretionary assets	$32,000,000
Discretionary tax-exempt	$16,000,000
Types of accounts managed	C
Tax-exempt clients	3
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	4

Computime Institutional Services Inc., an active equity and tactical asset allocation manager, uses sector rotation.

David M. Levin is chief investment officer and client contact.

Concord Capital Management

2800 Campus Drive, San Mateo, Calif.
94403; (415) 572-0400

Total assets managed	$2,300,000,000
Total discretionary assets	$2,140,000,000
Discretionary tax-exempt	$2,140,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	31
Minimum separate account	$5,000,000
Size of research staff	5

Concord Capital Management, an active equity manager, takes a contrarian approach, developing themes and identifying groups of stocks believed to be undervalued.

Harold L. Arbit is chief investment officer; Edward D. Matz Jr. is client contact.

Concord Investment Co.

100 S. Wacker Drive, Suite 300,
Chicago, Ill. 60606; (312) 236-1166

Total assets managed	$71,000,000
Total discretionary assets	$71,000,000
Discretionary tax-exempt	$34,000,000
Types of accounts managed	C
Tax-exempt clients	42
Minimum separate account	$500,000
No. of portfolio managers	3
Size of research staff	12

Concord Investment Co. is an active equity, active fixed-income and balanced manager.

Its primary equity approach focuses on growth stocks with low relative p/es and strong balance sheets.

For its fixed-income approach, the firm seeks to forecast major trends and purchases only investment-grade issues.

Richard R. Furmanski is chief investment officer and client contact.

Confed Investment Counselling Ltd.

321 Bloor St. E., Toronto, Ontario
M4W 1H1; (416) 323-8162

Total assets managed	$4,074,000,000
Total discretionary assets	$3,814,000,000
Discretionary tax-exempt	$3,814,000,000
Equity real estate assets	$314,000,000
Mortgage assets	$68,000,000
Non-North American equities	$66,000,000
Dedicated/immunized assets	$65,000,000
Tax-exempt clients	614
U.S. subsidiaries	35
Types of accounts managed	CGU
Minimum separate account	$25,000,000
No. of portfolio managers	6

Confed Investment Counselling Ltd., a Canadian firm, is an active equity, active fixed-income, balanced, real estate, active international/global equity and short-term manager.

Its equity approach emphasizes fundamental value by investing in well-managed companies with a sound history of financial performance.

Its bond approach seeks to enhance returns through trading and structural management given the expected level and direction of interest rates.

In real estate, the firm is value-oriented, seeking high-quality, income-producing properties adequately diversified by location, property type and tenant.

T.D. Pitts is chief investment officer; Frank D. Ryan is client contact.

Confederation Life Insurance Co.

P.O. Box 105103, Atlanta, Ga. 30348;
(404) 953-5100

Total assets managed	$14,003,000,000
Total discretionary assets	$9,178,000,000
Discretionary tax-exempt	$1,976,000,000
Pooled accounts	$74,000,000
Separate accounts	$4,000,000
GICs	$1,824,000,000
Annuities	$69,000,000
Other	$5,000,000
401(k)/457 assets managed	$522,000,000
Mortgage assets	$1,736,000,000
International equity assets	$6,000,000
International cash assets	$59,000,000
Tax-exempt clients:	
Pooled	294
Separate	1
Types of accounts managed	CGU
Minimum separate account	$5,000,000
No. of portfolio managers	15
Size of research staff	22

Confederation Life Insurance Co. is an active equity, active fixed-income, balanced, active international/global equity and short-term manager.

Its primary equity approach emphasizes fundamental value and diversification, investing in deeply undervalued securities based on long-term considerations. Its primary fixed-income approach uses interest rate anticipation to determine duration levels, and trading to enhance returns.

The data above include the assets of two subsidiaries: CL Capital Management Inc. and Confederation Pension Investment Management Ltd.

J. Clive Curtis is chief investment officer; Hubert F. Atkinson is client contact.

Connecticut General Pension Services

Hartford, Conn. 06152; (203)
726-3637

See entry for CIGNA ASSET ADVISERS INC.

Connecticut Mutual Life Insurance Co.

140 Garden St., Hartford, Conn.
06054; (203) 727-6500

Total assets managed	$11,663,000,000
Total discretionary assets	$11,663,000,000
Discretionary tax-exempt	$3,351,000,000
Pooled accounts	$96,000,000
GICs	$2,821,000,000
Other	$434,000,000
International equity assets	$41,000,000
Types of accounts managed	CEFGU
No. of portfolio managers	15

Connecticut Mutual Life Insurance Co. is an active equity, active fixed-income, balanced, active international equity, short-term and convertible manager.

Two equity approaches are offered: Rotational — using a top-down, fundamental investment process — and low p/e combined with achieved earnings in excess of expectations. Fixed-income approaches focus on four areas: Treasuries, investment-grade issues, high-yields and convertibles.

Pooled separate accounts, managed by external investment advisers, total an additional $348 million.

Richard W. Maine is chief investment officer; Maureen Ford is client contact.

Connecticut National Bank

777 Main St., Hartford, Conn. 06033;
(203) 728-4420

Total assets managed	$15,979,000,000
Total discretionary assets	$6,917,000,000
Discretionary tax-exempt	$2,654,000,000
Pooled accounts	$683,000,000
Separate accounts	$1,971,000,000
401(k)/457 assets managed	$260,000,000
Equity indexed assets	$13,000,000
Types of accounts managed	CEFGU
Minimum separate account	$2,000,000
No. of portfolio managers	26
Size of research staff	10

Connecticut National Bank is an active and passive equity, active fixed-income, balanced, short-term and GIC manager.

The firm has three equity styles: Growth emphasizes above-average growth in all capitalization sizes; growth and income style has a yield tilt; and special equity focuses on small-cap investing.

It also has three fixed-income approaches: Total return uses all maturities; intermediate stipulates a 10-year maximum; limited maturity has a three-year maximum effective maturity.

Rudolph Abel is chief investment officer; Arnold Boecklin is client contact.

Connors Investor Services

1100 Berkshire Blvd., Wyomissing, Pa.
19610; (215) 376-7418

Total assets managed	$138,000,000
Total discretionary assets	$110,000,000
Discretionary tax-exempt	$62,000,000
Types of accounts managed	CEFU
Tax-exempt clients	56
Minimum separate account	$250,000
No. of portfolio managers	3
Size of research staff	1

Connors Investor Services Inc. is an active and passive equity, passive fixed-income, balanced and covered option writing manager.

Covered option writing and small growth stocks are the firm's specialties. Hedged positions are selected after a series of screens to identify strong fundamentals, low variability and value. Small growth stocks are selected from in-house research, have strong balance sheets, are followed by few analysts and are owned by relatively few institutions.

James M. Connors is chief investment officer; Ronald H. Seher is client contact.

Consistent Asset Management Co.

116 Commons Court, Chadds Ford,
Pa. 19317; (215) 558-3000

Total assets managed	$920,000,000
Total discretionary assets	$920,000,000
Discretionary tax-exempt	$905,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	52
Minimum separate account	$10,000,000
No. of portfolio managers	4

Consistent Asset Management Co., an active fixed-income and short-term manager, uses mathematical analysis to allocate portfolios between U.S. Treasury issues and cash. It is trend recognition-oriented, but does not use forecasting.

Daryl L. Hudson is chief investment officer; David W. Umbs is client contact.

Constitution Capital Management

53 State St., Boston, Mass. 02109;
(617) 722-3950

Total assets managed	$4,067,000,000
Total discretionary assets	$4,067,000,000
Discretionary tax-exempt	$3,603,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	330
Minimum separate account	$5,000,000
No. of portfolio managers	20
Size of research staff	1

Constitution Capital Management is an active equity, active fixed-income, balanced and short-term manager.

Its primary equity approach employs quantitative valuation through a three-step process: equities are ranked by computer models focusing on fundamental factors; attractively ranked securities are screened to avoid risk; and buy/sell decisions are executed uniformly.

The firm's fixed-income management adds value through sector switches and issue selection. Portfolio durations are similar to that of the Shearson Leh-

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man Hutton Government Corporate Bond Index

John G. Anderson is chief investment officer; Harry Sterling Jr. is client contact.

Continental Asset Management

180 Maiden Lane, 10th Floor, New York, N.Y. 10038; (212) 440-7526

Total assets managed	$11,949,000,000
Total discretionary assets	$11,949,000,000
Discretionary tax-exempt	$556,000,000
401(k)/457 assets managed	$145,000,000
Mortgage assets	$45,000,000
Types of accounts managed	CF
Tax-exempt clients	3
Minimum separate account	$10,000,000
No. of portfolio managers	13
Size of research staff	6

Continental Asset Management, formerly CIC Asset Management, is an active equity, active fixed-income, balanced, active international fixed-income, short-term and futures and options manager.

Its equity approach uses Graham & Dodd analysis, investing conservatively in sectors with low price fluctuation and in companies with more predictable future earnings streams. Its fixed-income approach uses interest rate anticipation, sector analysis and non-consensus analysis.

Walter J. Blasberg and Gerald W. Bollman are chief investment officers. Diane S. Bressler is client contact.

Continental Assurance Co.

CNA Plaza, Chicago, Ill. 60685; (312) 822-5000

Total assets managed	$9,100,000,000
Total discretionary assets	$5,584,000,000
Discretionary tax-exempt	$5,584,000,000
Pooled accounts	$246,000,000
GICs	$3,662,000,000
Annuities	$407,000,000
Other	$1,269,000,000
401(k)/457 assets managed	$2,966,000,000
Types of accounts managed	CGU

Continental Assurance Co. is primarily a GIC manager.

Its equity approach focuses on long-term growth emphasizing security of principal. Its fixed-income approach is passive and uses interest rate anticipation and sector analysis, buying and holding bonds while immunizing a portion of the portfolio.

Don Rycroft is chief investment officer; Ralph Vuono is client contact.

Continental Capital Management Corp.

111 W. Jackson Blvd., Suite 1305, Chicago, Ill. 60697; (312) 828-7007

Total assets managed	$1,381,000,000
Total discretionary assets	$799,000,000
Discretionary tax-exempt	$799,000,000
401(k)/457 assets managed	$25,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	45
Minimum separate account	$5,000,000
No. of portfolio managers	4

Continental Capital Management Corp. is an active equity, active fixed-income, balanced, tactical asset allocation and convertible securities manager.

Its equity approach is value-oriented with a yield hurdle. Low p/e is emphasized.

Fixed-income investments are designed to provide positive real return over time while reducing return volatility. The style generally stresses matching the duration of the portfolio to that of the market. Maturity/yield curve, sector, quality, coupon and individual yield spreads are continuously monitored in an effort to identify anomalies in the marketplace and capitalize on additional incremental return.

Raymond O. Wicklander Jr. is client contact.

Contravisory Investment Management Corp.

37 Derby St., Hingham, Mass. 02043; (617) 740-1786

Total assets managed	$9,000,000
Total discretionary assets	$9,000,000
Discretionary tax-exempt	$6,000,000
Types of accounts managed	CF
Minimum separate account	$300,000
No. of portfolio managers	2
Size of research staff	1

Contravisory Investment Management Corp. is an active equity and active fixed-income manager.

Its equity approach relies upon a quantitative discipline that identifies changes in the long-term relative price trends of stocks, industry groups and market sectors. Its fixed-income approach uses interest rate anticipation.

G. Edward Noonan is chief investment officer and client contact.

Conus & Nicholson Inc.

800 W. 47th, Suite 101, Kansas City, Mo. 64112; (816) 931-5757

Total assets managed	$61,000,000
Total discretionary assets	$61,000,000
Discretionary tax-exempt	$48,000,000
Types of accounts managed	C
Tax-exempt clients	6
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	1

Conus & Nicholson Inc. is an active fixed-income, balanced and tactical asset allocation manager.

Its fixed-income approach emphasizes interest rate anticipation. Equities are used in tactical asset allocation.

Ronald L. Conus is chief investment officer; Jennifer D. Nicholson is client contact.

Cook Inlet Investment Management Inc.

3675 Mt. Diablo Blvd., Suite 350, Lafayette, Calif. 94549; (415) 283-7950

Total assets managed	$107,000,000
Total discretionary assets	$107,000,000
Discretionary tax-exempt	$107,000,000
Types of accounts managed	C
Tax-exempt clients	4
Minimum separate account	$5,000,000
No. of portfolio managers	3

Cook Inlet Investment Management Inc. is an active equity and active fixed-income manager.

The firm's equity approach seeks high total returns by focusing on growth in dividends and using consistent risk-controlled strategies. In fixed-income, portfolios are structured around a client-determined benchmark, adding value through rich/cheap analysis.

James E. Elder is chief investment officer; Lisa R. Weiss is client contact.

Cooke & Bieler Inc.

1700 Market St., Suite 3222, Philadelphia, Pa. 19103; (215) 567-1101

Total assets managed	$3,232,000,000
Total discretionary assets	$3,232,000,000
Discretionary tax-exempt	$2,704,000,000
401(k)/457 assets managed	$89,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	99
Minimum separate account	$25,000,000
No. of portfolio managers	9

Cooke & Bieler Inc. is an active equity, active fixed-income, balanced and mutual fund manager.

Its equity approach stresses low-risk growth. Portfolios are structured with higher-than-market yields and return on equity, lower-than-market betas and strong balance sheets.

Its fixed-income approach uses interest rate anticipation, with emphasis on credit analysis and a structured maturity schedule.

Robert T. Brooks is client contact.

Copley Real Estate Advisors

399 Boylston St., Boston, Mass. 02116; (617) 578-1200

Total assets managed	$14,592,000,000
Total discretionary assets	$14,592,000,000
Discretionary tax-exempt	$9,500,000,000
Equity real estate assets	$9,500,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	249
Minimum separate account	$100,000,000
No. of portfolio managers	22

Copley Real Estate Advisors, a real estate manager, emphasizes a developmental approach. The investments are structured as partnerships with local real estate developers in selected markets. The firm also makes opportunistic investments, using a contrarian philosophy.

Joseph W. O'Connor is chief investment officer; John C. Phillips Jr. is client contact.

Corbyn Associates Inc.

Suite 330, The Quadrangle, Village of Cross Keys, Baltimore, Md. 21210; (301) 532-8600

Total assets managed	$139,000,000
Total discretionary assets	$139,000,000
Discretionary tax-exempt	$90,000,000
International equity assets	$8,000,000
Types of accounts managed	CEF
Tax-exempt clients	117
Minimum separate account	$100,000
No. of portfolio managers	2
Size of research staff	3

Corbyn Associates Inc. is a balanced manager.

Its primary equity approach is value-oriented with a foundation of modified contrary opinion. The low p/e emphasis is on the inefficient sector and special situations. Fixed income uses interest rate anticipation and short-term U.S. government securities.

Daniel R. Long III is chief investment officer; Richard Hynson Jr. is client contact.

CoreStates Investment Advisers Inc.

P.O. Box 7618, F.C. 1-6-96, Philadelphia, Pa. 19101-7618; (215) 973-3744

Total assets managed	$5,200,000,000
Total discretionary assets	$5,200,000,000
Discretionary tax-exempt	$1,500,000,000
International equity assets	$50,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	150
Minimum separate account	$5,000,000
No. of portfolio managers	5
Size of research staff	6

CoreStates Investment Advisers Inc. is an active equity, active fixed-income, balanced, active international/global equity and short-term manager.

It primary equity approach focuses on growth stocks. Selection is based on high-quality financial characteristics, with particular attention to earnings momentum and valuation.

Its fixed-income approach uses interest-rate anticipation and active management of Treasury and agency securities, placing emphasis on duration management.

Paul G. Finegan is chief investment officer; John Ferro is client contact.

Cornerstone Asset Management Partners

270 Madison Ave., New York, N.Y. 10016; (212) 481-6040

Total assets managed	$0
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	3

Cornerstone Asset Management Partners is an active equity manager.

The firm creates broadly diversified portfolios of medium- and large-cap stocks designed to deliver approximately 300 to 400 basis points over the S&P 500 with approximately 20% less risk.

Jac Curley is chief investment officer; Duane G. Roberts is client contact.

Corporate Investment Associates (RT) Inc.

P.O. Box 7500, Station A, Toronto, Ontario M5W 1P9; (416) 981-6144

Total assets managed	$5,343,000,000
Total discretionary assets	$5,343,000,000
Discretionary tax-exempt	$3,614,000,000
For subsidiaries of U.S. firms	$817,000,000
Equity real estate	$67,000,000
Mortgage assets	$193,000,000
Non-North American equities	$30,000,000
Equity indexed assets	$38,000,000
Dedicated/immunized assets	$268,000,000
Tax-exempt clients	374
U.S. subsidiaries	46
Types of accounts managed	CEFGU
Minimum separate account	$4,300,000
No. of portfolio managers	12
Size of research staff	3

Corporate Investment Associates (RT) Inc., a Canadian firm, is an active and passive equity, active and passive fixed-income, balanced, tactical asset allocation, real estate, active international/global equity, short-term, mortgage and immunization manager.

Its equity approach is sector rotational and value-oriented. Sector weightings are based on the capital markets outlook with stocks chosen for strong fundamental value.

For fixed income, about half of the portfolios represent a diversified core and a long-term outlook; half reflects the three-month cyclical outlook.

In real estate, the firm concentrates on locations within the economic influence of major metropolitan areas with diversified economies.

Stephen J. Donihee is chief investment officer and client contact.

Corporate Property Investors

305 E. 47th St., New York, N.Y. 10017; (212) 421-8200

Total assets managed	$4,700,000,000
Total discretionary assets	$4,700,000,000
Discretionary tax-exempt	$2,800,000,000
Equity real estate assets	$2,700,000,000
Mortgage assets	$100,000,000
Types of accounts managed	CEFG
Tax-exempt clients	34

Corporate Property Investors is a real estate manager.

The firm is an equity-oriented REIT with a portfolio concentrated in 28 regional shopping centers and six office buildings. The firm emphasizes income growth and capital appreciation in real terms with minimum risk.

Hans C. Mautner is chief investment officer; William J. Lyons is client contact.

Cotswold Management Inc.

500 Park Ave., New York, N.Y. 10022; (212) 527-3498

Total assets managed	$11,000,000
Total discretionary assets	$11,000,000
Discretionary tax-exempt	$0
No. of portfolio managers	1
Size of research staff	1

Cotswold Management Inc. uses options and futures, including stock index fixed-income financial, metals, agricultural, energy and currencies.

Seth Rosenberg, president, is chief investment officer and client contact.

Coughlin Asset Management Group

621 17th St., Suite 1900, Denver, Colo. 80202; (800) 233-5133

Total assets managed	$42,000,000
Discretionary tax-exempt	$12,000,000
401(k)/457 assets managed	$9,000,000
Types of accounts managed	CG
Tax-exempt clients	14
Minimum separate account	$500,000
No. of portfolio managers	4
Size of research staff	2

Coughlin Asset Management Group is an active equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

Its equity approach is quantitative, concentrating on growth and emerging growth stocks. Its fixed-income approach is keyed to interest rate anticipation and sector analysis. External managers run an additional $14 million on the firm's behalf.

Michael J. Urbana is chief investment officer; Mary Ellsberg is client contact.

County NatWest Investment Management

100 Wall St., New York, N.Y. 10005; (212) 440-8565

Total assets managed	$19,500,000,000
Total discretionary assets	$19,500,000,000
Discretionary tax-exempt	$1,153,000,000
International equity assets	$269,000,000
International fixed-income assets	$21,000,000
Types of accounts managed	CG
Tax-exempt clients	7
Minimum separate equity account	$20,000,000
Minimum separate bond account	$15,000,000
No. of portfolio managers	6

County NatWest Investment Management actively manages international/global equity, fixed-income and balanced accounts. Currency overlay programs also are offered.

Its equity approach employs active market allocation, using fundamental subjective judgments with quantitative implementation. Proprietary market-representative funds or stock index futures (with client approval) are used. Fixed-income investments are based on interest rate anticipation.

Of the assets above, the firm manages currency overlay programs on $741 million.

David Gamble is chief investment officer; Lynne S. Minard is client contact.

Cowen Asset Management

Financial Square, New York, N.Y. 10005; (212) 495-6652

Total assets managed	$363,000,000
Total discretionary assets	$363,000,000
Discretionary tax-exempt	$244,000,000

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401(k)/457 assets managed	$13,000,000
Types of accounts managed	CFGU
Tax-exempt clients	189
Minimum separate account	$500,000
No. of portfolio managers	3
Size of research staff	3

Cowen Asset Management is an active equity manager.

Its equity approach seeks companies with above-market yields, prospects of future dividend growth and balance sheet strength. Its valuation approach focuses on undervalued assets, cash flow and earnings momentum. Its fixed-income approach is passive, emphasizing preservation of capital. Staggered maturities and short duration neutralize interest rate impact.

William Church is chief investment officer; Jack Estes is client contact.

The Crabbe-Huson Co.

121 S.W. Morrison, Suite 1400,
Portland, Ore. 97204; (503) 295-0111

Total assets managed	$505,000,000
Total discretionary assets	$505,000,000
Discretionary tax-exempt	$435,000,000
401(k)/457 assets managed	$20,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	31
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	5

The Crabbe-Huson Co. is an active equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

Its equity approach is price-driven, value-oriented and risk averse. Investments are concentrated in out-of-favor stocks bought at substantial discounts with an identifiable catalyst for price advance. For fixed-income, the firm identifies interest rate turning points to add value through duration shifts.

Richard S. Huson is chief investment officer; James E. Crabbe is client contact.

Cramblit & Carney Inc.

523 W. Sixth St., Suite 1134, Los
Angeles, Calif. 90014; (213) 680-0562

Total assets managed	$941,000,000
Total discretionary assets	$941,000,000
Discretionary tax-exempt	$742,000,000
Types of accounts managed	CEFU
Tax-exempt clients	37
Minimum separate account	$10,000,000
No. of portfolio managers	5

Cramblit & Carney Inc. is an active equity (small-cap) and balanced manager.

Its equity approach is based on growth and low p/e stock strategies. Its fixed-income approach uses sector analysis.

Richard P. Carney is chief investment officer; Barry T. Seymour is client contact.

Cramer Rosenthal McGlynn

520 Madison Ave., New York, N.Y.
10022; (212) 838-3830

Total assets managed	$417,000,000
Discretionary tax-exempt	$164,000,000
Types of accounts managed	CEF
Tax-exempt clients	21
Minimum separate account	$3,000,000
No. of portfolio managers	3
Size of research staff	3

Cramer Rosenthal McGlynn Inc. is an active equity, balanced and special investments manager.

Its equity approach emphasizes capital appreciation, stable asset allocation and concentration. Changing dynamics, low relative valuations and low institutional ownership/minimal research coverage are considered. Its fixed-income approach uses interest rate anticipation, emphasizing short-term U.S. government obligations.

Gerald Cramer is chief investment officer; Lena A. Khatcherian is client contact.

Crawford Investment Counsel Inc.

100 Galleria Parkway, Suite 980,
Atlanta, Ga. 30339; (404) 859-0045

Total assets managed	$260,000,000
Total discretionary assets	$260,000,000
Discretionary tax-exempt	$216,000,000
Types of accounts managed	CEF
Tax-exempt clients	17
Minimum separate account	$5,000,000
No. of portfolio managers	1
Size of research staff	1

Crawford Investment Counsel Inc. is an active equity and balanced manager.

In equities, the firm focuses on a dividend growth style. Portfolios have an above-average current yield and an above-average dividend growth rate, which results in downside protection and low volatility.

John H. Crawford is chief investment officer; Sarah Jane Ross is client contact.

Credit Suisse Asset Management

280 Park Ave., 27th Floor East, New
York, N.Y. 10017; (212) 557-0510

Total assets managed	$140,000,000
Discretionary tax-exempt	$127,000,000
International equity assets	$105,000,000
International cash assets	$5,000,000
Types of accounts managed	CF
Tax-exempt clients	11
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	6

Credit Suisse Asset Management is an active domestic and international/global equity manager.

Its growth stock approach incorporates an actively managed, three-tiered, bottom-up/top-down investment process that examines companies, worldwide investment themes and country/currency allocations. Forward currency contracts are used.

Gordon L. Bowyer is chief investment officer; Richard R. Smith is client contact.

Crescent Capital Inc.

300 Crescent Court, Suite 1300,
Dallas, Texas 75201; (214) 871-6700

Total assets managed	$26,000,000
Total discretionary assets	$26,000,000
Discretionary tax-exempt	$26,000,000
Equity indexed assets	$26,000,000
Types of accounts managed	CEF
Tax-exempt clients	4
Minimum separate account	$25,000,000
No. of portfolio managers	2

Crescent Capital Inc. is an enhanced S&P 500 index fund manager.

The firm employs a passive, disciplined investment approach to enhance the return of the S&P 500 through a quantitative, fully invested style designed to produce consistent returns in excess of the market, with a portfolio beta of 1.

Charles Gaecke is chief investment officer and client contact.

Crestar Bank

919 E. Main St., Richmond, Va.
23219; (804) 782-7405

Total assets managed	$6,841,000,000
Total discretionary assets	$2,919,000,000
Discretionary tax-exempt	$617,000,000
Pooled accounts	$617,000,000
Types of accounts managed	CEFGU
Minimum separate account	$750,000
No. of portfolio managers	1

Crestar Bank is an active and passive equity, active fixed-income, balanced and short-term manager.

Its equity approach uses sector rotation, purchasing undervalued securities in sectors that should benefit from anticipated economic cycles.

Its fixed-income approach uses high-quality bonds and varies maturities according to interest rate projections.

David A. Halloran is chief investment officer; Gordon R. Boardway is client contact.

Criterion Investment Management Co.

1000 Louisiana, Houston, Texas
77002; (713) 751-2400

Total assets managed	$10,149,000,000
Total discretionary assets	$10,149,000,000
Discretionary tax-exempt	$8,008,000,000
Dedicated/immunized assets	$1,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	101
Minimum separate equity account	$1,000,000
Minimum separate bond account	$10,000,000
No. of portfolio managers	12
Size of research staff	4

Criterion Investment Management Co. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach focuses on determining the relative attractiveness of stock vs. cash equivalents and has a growth/earnings momentum bias with major sectors/themes that are perceived to be the most attractive.

Its fixed-income approach focuses on interest rate anticipation and sector shifts, and uses a proprietary computerized system to evaluate and monitor the risk/reward relationship of individual bonds and bond portfolios.

In addition to the assets above, $2.1 billion is managed by an affiliate, Transamerica Fund Management Co.

Charles Miller is chief investment officer; John R. Pipkin is client contact.

Crown Life Insurance Co.

201 N. Union St., Alexandria, Va.
22314; (703) 684-4100

Total assets managed	$8,268,000,000
Total discretionary assets	$7,784,000,000
Discretionary tax-exempt	$3,857,000,000
Pooled accounts	$1,115,000,000
GICs	$2,656,000,000
Other	$86,000,000
Tax-exempt clients:	
Pooled	450
Types of accounts managed	CGU
Minimum separate account	$5,000,000
No. of portfolio managers	15
Size of research staff	6

Crown Life Insurance Co. is an active domestic and international equity and fixed-income, balanced and short-term manager.

Its equity approach is value-oriented with a contrarian bias, seeking quality stocks trading at a discount to real asset value.

Its fixed-income approach is managed by strict duration control, oriented to interest rate anticipation. Value is added by sector spread trading, arbitrage and certificate lending.

A.G. Wirth is chief investment officer; D.G. Mather is client contact.

Foreign business survey: July 23.

C-S Capital Advisors Inc.

8150 Corporate Park Drive, Suite 224,
Cincinnati, Ohio 45242; (513) 489-5556

Total assets managed	$225,000,000
Total discretionary assets	$225,000,000
Discretionary tax-exempt	$225,000,000
Types of accounts managed	CFG
Tax-exempt clients	6
Minimum separate account	$20,000,000
No. of portfolio managers	4

C-S Capital Advisors Inc. is an active equity and short-term manager.

Its primary equity approach is based on a long-term, pre-determined discipline that stresses value in out-of-favor stocks and (by client request) uses an active options writing program to enforce a sell discipline. Options are used.

Cliff Stahl is chief investment officer; Paul G. Chenault is client contact.

C&S Investment Advisors

P.O. Box 4114, Atlanta, Ga. 30302;
(404) 897-3306

See entry for CITIZENS AND SOUTHERN CORP.

CT Investment Counsel Inc.

110 Yonge St., Suite 800, Toronto,
Ontario M5C 1T4; (416) 869-5931

Total assets managed	$2,680,000,000
Total discretionary assets	$1,959,000,000
Discretionary tax-exempt	$1,959,000,000
Non-North American equities	$4,000,000
Tax-exempt clients	50
Types of accounts managed	CGU
Minimum separate account	$4,000,000
No. of portfolio managers	8
Size of research staff	4

CT Investment Counsel Inc., a Canadian firm, is an active equity, active fixed-income, balanced, active international/global equity and short-term manager.

Its equity approach employs a bottom-up methodology with a top-down confirmation, using three well-defined disciplines: quantitative, fundamental and technical. Companies ranked highly by the bottom-up methodology are integrated with the top-down analysis.

The fixed-income approach uses interest rate anticipation and sector/credit trading.

John P. Mulvihill and Stanley G. Archdekin are chief investment officers; Mr. Archdekin is client contact.

Cullen, Fortier Asset Management

21550 Oxnard St., Suite 470,
Woodland Hills, Calif. 91367; (818) 710-7788

Total assets managed	$62,000,000
Total discretionary assets	$41,000,000
Total discretionary tax-exempt	$30,000,000
401(k)/457 assets managed	$8,000,000
Types of accounts managed	CEFG
Tax-exempt clients	86
Minimum separate account	$200,000
No. of portfolio managers	2
Size of research staff	2

Cullen, Fortier Asset Management, an active equity and balanced manager, selects stocks in individual industries and companies based on above-average earnings growth. For fixed-income, interest rate anticipation is used. Options are used.

Rick Cullen is chief investment officer; Paul Fortier is client contact.

Cumberland Advisors

614 Landis Ave., Vineland, N.J.
08360; (609) 692-6690

Total assets managed	$199,000,000
Total discretionary assets	$185,000,000
Discretionary tax-exempt	$68,000,000
Types of accounts managed	CU
Tax-exempt clients	80
Minimum separate account	$100,000
No. of portfolio managers	4
Size of research staff	2

Cumberland Advisors Pty. is an active equity, active fixed-income, balanced and municipal bond manager.

Its equity approach relies primarily on fundamental analysis with a bias toward low p/e, p/s or p/cf valuations. Its top-down fixed-income approach integrates interest rate anticipation, sector analysis and duration.

David R. Kotok is chief investment officer; Suzanne N. Greenberg is client contact.

John M. Cunningham Inc.

200 Eagle Road, Suite 204, Wayne,
Pa. 19087; (215) 687-5060

Total assets managed	$18,000,000
Total discretionary assets	$18,000,000
Discretionary tax-exempt	$12,000,000
Types of accounts managed	C
Tax-exempt clients	36
Minimum separate account	$500,000
No. of portfolio managers	1
Size of research staff	1

John M. Cunningham Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach uses growth stocks, sector rotation and Graham & Dodd principles. The firm concentrates on industry analysis and buying dividend and earnings growth leaders.

The fixed-income approach uses interest rate anticipation, following the market fundamentally and technically.

John M. Cunningham is chief investment officer and client contact.

Martin Currie Ltd. & Subsidiaries

29 Charlotte Square, Edinburgh, EH2
4HA, U.K.; 031-225-3811

Total assets managed	$4,330,000,000
Discretionary tax-exempt	$193,000,000

Martin Currie & Subsidiaries, managing $2.55 billion in tax-exempt assets, of which $193 million is for U.S. clients, emphasizes equity and international investment capabilities.

The firm's long-term equity approach emphasizes country allocation. Emerging growth and growth stocks, sector rotation and value also are important, but the approach will differ according to the nature of the market in which assets are invested.

Fixed-income securities are only used to fulfill the requirements of endowment clients, dictated by interest rates and inflation trends.

Joe Scott Plummer is the chief investment officer.

The assets of the following subsidiaries are included above.

- Martin Currie Inc. manages $213 million for North American clients, of which $193 million — representing six clients — is tax exempt.

Client contacts for North America are Michael Kennedy, Marianne Hay and Michael Gibson.

- Martin Currie Investment Management Ltd. manages $4.33 billion for U.K. clients, of which $1.923 billion was for U.K. pension funds.
- Martin Currie Unit Trusts Ltd. manages $275 million in a range of open-end mutual funds.

Cutler & Co. Inc.

503 Airport Road, Medford, Ore.
97504; (503) 770-9000

Total assets managed	$692,000,000
Total discretionary assets	$692,000,000
Discretionary tax-exempt	$647,000,000
401(k)/457 assets managed	$17,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	205
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	5

Cutler & Co. Inc., an active equity manager, bases its philosophy on analysis of corporate dividend policy. The firm maintains that corporate dividend growth is a better indicator of price movement than reported earnings.

Geoffrey W. Cutler is chief investment officer; Mark S. Patten is client contact.

Cypress Asset Management

70 E. 55th St., New York, N.Y. 10022;
(212) 753-0700

Total assets managed	$1,000,000,000
Total discretionary assets	$7,000,000
Discretionary tax-exempt	$3,000,000
Types of accounts managed	CF
Tax-exempt clients	10
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	4

Cypress Asset Management, formerly Solomon Asset Management, is an active fixed-income and convertible bond manager focusing on lower-rated high-yield and convertible bonds. Security mix depends on yield spreads, but the firm aggressively seeks high total returns without timing interest rates.

Gerald B. Unterman is chief investment officer; Marianne Murphy is client contact.

D

D.A. Management Inc.

7777 Center Ave., Suite 500,
Huntington Beach, Calif. 92647;
(714) 891-6080

Total assets managed	$95,000,000
Discretionary tax-exempt	$95,000,000
Equity real estate assets	$39,000,000
Mortgage assets	$18,000,000
Types of accounts managed	G
Tax-exempt clients	2
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	1

D.A. Management Inc., a real estate manager, acquires equity and participating loan interests that have the potential of generating operating cash flow and profits through financial structure, property management and personal involvement.

Daniel M. Ardell is chief investment officer and client contact.

Daiwa International Capital Management Corp.

200 Liberty St., 26th Floor, New York,
N.Y. 10281; (212) 341-5405

Total assets managed	$14,615,000,000
Total discretionary assets	$14,615,000,000
Discretionary tax-exempt	$512,000,000
International equity assets	$454,000,000
International cash assets	$41,000,000
Equity indexed assets	$17,000,000
Types of accounts managed	CG
Tax-exempt clients	8
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	148

Daiwa International Capital Management Corp. is an active and passive international/global equity manager.

The firm specializes in the Pacific Basin. Research-oriented, its stock selection concentrates on assessing the long-term growth potential and the relative value of companies within growth industries throughout the region. Various quantitative techniques are used as screens.

Shunsuke Ichijo is chief investment officer; Jay S. Mancus is client contact.

Dana Investment Advisors

330 S. Executive Drive, Suite 301,
Brookfield, Wis. 53005; (414) 782-3631

Total assets managed	$370,000,000
Total discretionary assets	$370,000,000
Discretionary tax-exempt	$250,000,000
401(k)/457 assets managed	$20,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	75
Minimum separate account	$2,000,000
No. of portfolio managers	3

Dana Investment Advisors is an active equity, active fixed-income, balanced and short-term manager.

In equities, its risk-averse approach emphasizes growth and income stocks. It is value-oriented on a total rate of return basis.

The firm primarily is a fixed income manager, looking to extract current value and keep interest rate (movement) risk to a minimum; variable-rate government-backed securities are used extensively.

Michael L. Dana is chief investment officer; Donald J. Moore is client contact.

Darien Capital Management

66 Field Point Road, Greenwich,
Conn. 06830; (203) 661-6681

Total assets managed	$900,000,000
Total discretionary assets	$900,000,000
Discretionary tax-exempt	$900,000,000
Types of accounts managed	CG
Tax-exempt clients	4
Minimum separate account	$50,000,000
No. of portfolio managers	2
Size of research staff	2

Darien Capital Management is a short-term cash and index option overwrite manager. It runs overlays for all of the above assets, but doesn't manage them.

Its approach is market-timing oriented, using index option overwriting for stocks and bonds.

Gregory M. Hryb is chief investment officer; Deborah Hootman is client contact.

John Stewart Darrell & Co.

503 Faulconer Drive, Charlottesville,
Va. 22901; (804) 977-7010

Total assets managed	$90,000,000
Total discretionary assets	$90,000,000
Discretionary tax-exempt	$31,000,000
Types of accounts managed	CEF
Tax-exempt clients	27
Minimum separate account	$500,000
No. of portfolio managers	2

John Stewart Darrell & Co. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach uses low p/e stocks and Graham & Dodd analysis. Its fixed-income approach uses interest rate anticipation.

Jack Darrell is chief investment officer and client contact.

Dauphin Deposit Bank & Trust Co.

213 Market St., Harrisburg, Pa. 17105;
(717) 255-2254

Total assets managed	$1,039,000,000
Discretionary tax-exempt	$404,000,000
Pooled accounts	$276,000,000
Separate accounts	$128,000,000
401(k)/457 assets managed	$55,000,000
Tax-exempt clients:	
Commingled	230
Separate	78
Types of accounts managed	CEFGU
Minimum separate account	$500,000
No. of portfolio managers	5
Size of research staff	2

Dauphin Deposit Bank & Trust Co. is an active equity, active fixed-income, balanced and short-term manager.

Its value-oriented equity approach emphasizes both fundamental and technical analysis of business sectors and individual companies using a variety of techniques to determine relative value. Its fixed-income approach uses interest rate anticipation and sector analysis, with an emphasis on quality and liquidity of issues. Maturities are of 10 years or less.

Robert M. Spicer is chief investment officer; Andrew W. Wesler is client contact.

Davenport & Co. of Virginia

801 E. Main St., Richmond, Va.
23219; (804) 780-2117

Total assets managed	$269,000,000
Total discretionary assets	$155,000,000
Discretionary tax-exempt	$85,000,000

Types of accounts managed	CEF
Tax-exempt clients	58
Minimum separate account	$200,000
No. of portfolio managers	7
Size of research staff	4

Davenport & Co. of Virginia Inc. is an active and passive equity, active and passive fixed-income and balanced manager.

Its primary equity approach uses Graham & Dodd principles for value investing. Growth stocks are used on a selective basis. Its fixed-income approach uses interest rate anticipation.

Joseph L. Antrim is chief investment officer. Nancy P. Jenkins is client contact.

Davidson, Garrard & Goode

P.O. Box 939, Lynchburg, Va. 24505;
(804) 847-6600

Total assets managed	$85,000,000
Total discretionary assets	$85,000,000
Discretionary tax-exempt	$22,000,000
Types of accounts managed	CEF
Tax-exempt clients	47
Minimum separate account	$500,000
No. of portfolio managers	3
Size of research staff	1

Davidson, Garrard & Goode is an active and passive equity, active and passive fixed-income and balanced manager.

Its equity approach centers around stocks that quantitatively offer value yet are unrecognized by the general market. Its fixed-income approach is based on interest rate anticipation, using governments, high-grade corporates and quality municipals with maturities of 10 years or less.

Edgar D. Garrard is chief investment officer; William S. Davidson is client contact.

Davis Hamilton Associates

777 Walker, Suite 2570, Houston,
Texas 77002; (713) 237-8421

Total assets managed	$224,000,000
Total discretionary assets	$154,000,000
Discretionary tax-exempt	$150,000,000
Mortgages	$15,000,000
Types of accounts managed	CGU
Tax-exempt clients	9
Minimum separate account	$250,000
No. of portfolio managers	3

Davis Hamilton Associates is an active equity and balanced manager.

Its primary equity approach focuses on companies with above average growth in earnings and dividends, with close attention paid to valuation.

In fixed income, interest rate anticipation is used. Preservation of principal, high current returns and maintenance of liquidity are emphasized.

Robert C. Davis is chief investment officer; Jeffrey Arcy is client contact.

Davis, Weaver & Mendel Inc.

5600 Glenridge Drive, Suite 200,
Atlanta, Ga. 30342; (404) 252-0077

Total assets managed	$235,000,000
Total discretionary assets	$235,000,000
Discretionary tax-exempt	$180,000,000
401(k)/457 assets managed	$10,000,000
Tax-exempt clients	180
Minimum separate account	$1,000,000
No. of portfolio managers	4

Davis, Weaver & Mendel Inc. is an active equity, active fixed-income, balanced and tactical asset allocation manager.

Its equity approach emphasizes market timing and sector rotation. The investment process is disciplined, based on computer generated models.

Its primary fixed income approach is based on interest rate anticipation. Maturity management is used to enhance profitability.

Thomas H. Weaver is chief investment officer; Marsh Douthat is client contact.

Dawes Investment Service

900 E. Indiantown Road, Suite 305,
Jupiter, Fla. 33477; (407) 747-0896

Total assets managed	$100,000,000
Total discretionary assets	$92,000,000
Discretionary tax-exempt	$53,000,000
Types of accounts managed	CEF
Tax-exempt clients	84
Minimum separate account	$200,000
No. of portfolio managers	2

Dawes Investment Service Inc., is an active equity, active fixed-income and balanced manager.

Its highly disciplined, value-oriented equity strategy uses low p/e stocks and sector rotation. A proprietary mathematical model identifies buy/sell points. A semiactive fixed-income approach uses interest rate anticipation to adjust maturities. Sector mix is based on credit quality/yield spread analysis.

Richard C. Sunshine is chief investment officer; Kristy J. Dodge is client contact.

DB Capital Management International GmbH-New York

31 W. 52nd St., New York, N.Y.
10019; (212) 474-8300

Total assets managed	$4,155,000,000
Total discretionary assets	$3,997,000,000
Discretionary tax-exempt	$366,000,000
International equity assets	$163,000,000
International fixed-income assets	$83,000,000
International cash assets	$18,000,000
Types of accounts managed	CG
Tax-exempt clients	6
Minimum separate account	$10,000,000
No. of portfolio managers	19
Size of research staff	25

DB Capital Management International GmbH — New York is an active international and domestic equity and fixed-income and balanced manager.

Its equity approach is top-down, emphasizing country and currency allocation based on economic and political fundamentals, industrial-sector outlook and analysis. For fixed-income, the firm takes a concentrated approach, equally weighting currency and interest rate considerations. It specializes in German- and European-mandated fixed-income portfolios for North American clients.

William R. Richards is chief investment officer; Michael Tintelnot and Richard Strehle are client contacts.

Dean Investment Associates

2480 Kettering Tower, Dayton, Ohio
45423; (513) 222-9531

Total assets managed	$2,861,000,000
Total discretionary assets	$2,861,000,000
Discretionary tax-exempt	$1,045,000,000
401(k)/457 assets managed	$50,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	95
Minimum separate account	$100,000
No. of portfolio managers	22
Size of research staff	1

Dean Investment Associates is an active equity, balanced and tactical asset allocation manager.

Its equity approach uses growth and low p/e stocks based on Graham & Dodd analysis, sector rotation and market timing techniques. The firm combines a top-down approach with fundamental and technical methodologies in selecting securities and establishing optimal asset allocation targets.

Dennis D. Dean is chief investment officer; Richard M. Luthman is client contact.

Dearden, Maguire and Weaver Inc.

2 Penn Center Plaza, Suite 1702,
Philadelphia, Pa. 19102; (215)
972-0888

Total assets managed	$700,000,000
Total discretionary assets	$700,000,000
Discretionary tax-exempt	$325,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	46
Minimum separate account	$500,000
No. of portfolio managers	5
Size of research staff	1

Dearden, Maguire and Weaver Inc. is an active equity, active fixed-income, balanced and bank portfolio manager.

Its equity approach invests in growth stocks based on Graham & Dodd principles. The firm is quality-oriented based on economic outlook, relative valuation analysis and fundamental and technical data.

Its fixed-income approach uses interest rate anticipation. Portfolios are limited to securities with A or better ratings and maturities of 10 years or less.

Edward C. Dearden, James M. Weaver and Alexander A. Maguire are chief investment officers; Mr. Dearden is client contact.

Debenham, Tewson & Chinnocks Inc.

150 E. 52nd St., Suite 7A, New York,
N.Y. 10022; (212) 758-8218

Total assets managed	$375,000,000
Discretionary tax-exempt	$0
No. of portfolio managers	3

Debenham, Tewson & Chinnocks Inc., a real estate manager, seeks undervalued and underperforming assets, and is countercyclical-acquisition oriented.

C.J. Wood is chief investment officer and client contact.

Master trust: Oct. 1

Delafield Asset Management

63 Wall St., New York, N.Y. 10005;
(212) 269-0660

Total assets managed	$1,004,000,000
Discretionary tax-exempt	$294,000,000
Types of accounts managed	CEF
Tax-exempt clients	12
Minimum separate account	$1,000,000
No. of portfolio managers	1
Size of research staff	3

Delafield Asset Management is an active equity manager.

Its equity approach is value-oriented with an emphasis on special situations, low p/e and undervalued investments purchased at measured prices to limit market risk.

J. Dennis Delafield is chief investment officer and client contact.

Delaware Investment Advisers

1 Commerce Square, Philadelphia,
Pa. 19103; (215) 568-5880

Total assets managed	$17,313,000,000
Total discretionary assets	$17,313,000,000
Discretionary tax-exempt	$15,941,000,000

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WILMINGTON TRUST

Types of accounts managed	CEFGU
Tax-exempt clients	193
Minimum separate account	$10,000,000
No. of portfolio managers	21

Delaware Investment Advisers is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach combines sector rotation with low p/e and value equity income strategies. Its philosophy stresses risk management within a total rate of return orientation.

Its fixed-income approach uses equity-type credit analysis, a sensitivity to business cycles and sophisticated trading strategies to protect the income premium on high-yielding corporate bonds.

John H. Durham is chief investment officer; Winthrop S. Jessup is client contact.

Delta Financial Inc.

3500 Pacific Ave., Virginia Beach, Va.
23451; (804) 491-1200

Total assets managed	$85,000,000
Total discretionary assets	$85,000,000
Discretionary tax-exempt	$71,000,000
Types of accounts managed	CU
Tax-exempt clients	14
Minimum separate account	$500,000
No. of portfolio managers	4
Size of research staff	4

Delta Financial Inc. is an active equity, active fixed-income, balanced and tactical asset allocation manager.

Its equity approach uses growth and value judgmental strategies. Growth is small-cap and momentum-based. Value is contrarian and shareholder value-based. Its defensive fixed-income approach uses the highest quality instruments in a relative value approach, emphasizing duration shifts.

Mark T. Finn is chief investment officer; Eloise C. Chandler is client contact.

Delta Financial Management

37 Derby St., Hingham, Mass. 02043;
(617) 749-8156

Total assets managed	$66,000,000
Total discretionary assets	$66,000,000
Discretionary tax-exempt	$56,000,000
Types of accounts managed	CEU
Tax-exempt clients	26
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	1

Delta Financial Management Corp. is a an active and passive equity and balanced manager.

It follows a low-risk, conservative investment philosophy. The equity approach focuses on low p/e stocks with above-average yields. In fixed income it concentrates on high-quality bonds with maturities of 10 years or less.

Frank Weldon is chief investment officer; William M. Weldon is client contact.

D.F. Dent & Co. Inc.

2 E. Read St., Baltimore, Md. 21202;
(301) 837-2544

Total assets managed	$340,000,000
Total discretionary assets	$340,000,000
Discretionary tax-exempt	$130,000,000
International fixed-income assets	$8,000,000
Types of accounts managed	CEF
Tax-exempt clients	41
Minimum separate account	$2,000,000
No. of portfolio managers	1
Size of research staff	2

D.F. Dent & Co. Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach uses emerging growth and growth stocks.

T.F. O'Neil Jr. is chief investment officer; S.C. Ellwood is client contact.

Denver Investment Advisors

633 17th St., Suite 1800, Denver,
Colo. 80270; (303) 293-2020

Total assets managed	$5,000,000,000
Total discretionary assets	$5,000,000,000
Discretionary tax-exempt	$4,560,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	83
Minimum separate account	$10,000,000
No. of portfolio managers	7
Size of research staff	10

Denver Investment Advisors Inc. is an active equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

Its equity approach uses a fundamental, bottom-up stock selection process focusing on small- to midsize companies. Earnings growth is emphasized, and strict valuation techniques are used.

For fixed income, the firm divides the market into three duration categories. Portfolios emphasize high-quality (non-Treasury), undervalued sectors and special situation bonds. Asset allocation is used to set duration.

Kenneth Penland is chief investment officer; Dennis Larkin is client contact.

Deposit Guaranty National Bank

P.O. Box 1200, Jackson, Miss.
39215-1200; (601) 354-8128

Total assets managed	$1,400,000,000
Total discretionary assets	$800,000,000
Discretionary tax-exempt	$451,000,000
Pooled accounts	$197,000,000
Separate accounts	$254,000,000
401(k)/457 assets managed	$60,000,000
Types of accounts managed	CEFU
Minimum separate account	$500,000

Deposit Guaranty National Bank is an active equity, active fixed-income, balanced, real estate and short-term manager.

Its equity approach combines sector rotation, growth stock analysis and emerging growth. Its fixed-income approach emphasizes high credit quality, duration analysis and investment rate forecasts.

In real estate, it has equity interests in existing income-producing commercial and industrial property.

Gerald L. White is chief investment officer; C. David Cleland is client contact.

Derby & Co. Inc.

57 Wells Ave., Newton, Mass. 02159;
(617) 332-2449

Total assets managed	$96,000,000
Total discretionary assets	$96,000,000
Discretionary tax-exempt	$82,000,000
Minimum separate account	$500,000
No. of portfolio managers	2

Derby & Co. Inc. is an active equity and active and passive fixed-income manager.

In fixed income, it uses interest rate anticipation.

Burt Derby is chief investment officer; Mark Derby is client contact.

Dewey Square Investors

1 Financial Center, Boston, Mass.
02111; (617) 434-6217

Total assets managed	$3,621,000,000
Total discretionary assets	$3,621,000,000
Discretionary tax-exempt	$3,621000,000
401(k)/457 assets managed	$130,000,000
Dedicated/immunized assets	$600,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	155
Minimum separate account	$5,000,000
No. of portfolio managers	9
Size of research staff	3

Dewey Square Investors Corp. is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach is value-oriented, constructing highly diversified portfolios of stocks with high relative valuation ranking and poor relative past price behavior.

Its fixed-income approach uses sector analysis. Portfolios generally have a yield bias. Four key areas are evaluated: duration/maturity, yield curve placement, sector selection, and item selection.

Peter M. Whitman Jr. is chief investment officer; Caroline R. Hovey is client contact.

Dietche & Field Advisers Inc.

437 Madison Ave., New York, N.Y.
10022; (212) 752-2047

Total assets managed	$340,000,000
Discretionary tax-exempt	$253,000,000
Types of accounts managed	CEFG
Tax-exempt clients	10
Minimum separate account	$10,000,000
No. of portfolio managers	2
Size of research staff	1

Dietche & Field Advisers Inc., an active equity manager, uses Graham & Dodd analysis in its bottom-up approach. It seeks undervalued companies undergoing significant change.

Paul Dietche is chief investment officer; Lincoln Field is client contact.

W. David DiLeo Investment Advisor

111 S. Bemiston, Suite 202, St. Louis,
Mo. 63105; (314) 727-8050

Total assets managed	$120,000,000
Tax-exempt assets managed	$10,000,000
401(k)/457 assets managed	$1,000,000
Types of accounts managed	CF
Minimum separate account	$500,000
No. of portfolio managers	1

W. David DiLeo Investment Advisor is an active equity, active fixed-income and balanced manager.

Its equity approach is value-oriented using Graham & Dodd analysis, growth and low p/e stocks and sector rotation. Its fixed-income approach is driven by interest rate anticipation and sector analysis.

W. David DiLeo is chief investment officer and client contact.

Dillon, Read Capital Inc.

535 Madison Ave., New York, N.Y.
10022; (212) 906-7659

Total assets managed	$3,185,000,000
Total discretionary assets	$3,185,000,000
Discretionary tax-exempt	$2,556,000,000
401(k)/457 assets managed	$1,368,000,000
Types of accounts managed	CFGU
Tax-exempt clients	61
Minimum separate account	$10,000,000
No. of portfolio managers	5

Dillon, Read Capital Inc. is an active equity and balanced manager.

Its equity approach emphasizes active asset allocation, using a price-sensitive, bottom-up stock selection process in which securities of quality companies are bought when they are out of favor and undervalued. Cash will be raised when securities are overvalued or the trend to overall liquidity is negative.

In balanced accounts, fixed-income assets are actively managed, adjusting maturities depending on valuation and trends of liquidity. High-quality issues are used.

Timothy G. Dalton is chief investment officer; David A. Dewey is client contact.

Dimensional Fund Advisors

1299 Ocean Ave., Suite 650, Santa
Monica, Calif. 90401; (213)
395-8005

Total assets managed	$5,509,000,000
Total discretionary assets	$5,509,000,000
Discretionary tax-exempt	$5,042,000,000
401(k)/457 assets managed	$19,000,000
International equity assets	$633,000,000
Equity indexed assets	$3,819,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	114
Minimum separate account	$25,000,000
No. of portfolio managers	9

Dimensional Fund Advisors Inc. is a passive equity, active fixed-income and passive international/global equity manager.

Its primary equity approach is to invest in small companies in the U.S. and major international markets, providing diversification and potential for long-term return premiums.

Its primary fixed-income approach uses a variable maturity strategy that maximizes expected returns by shifting maturities in response to changes in the current prices.

The firm's assets include those managed by Dimensional Asset Management Ltd., London.

Rex A. Sinquefield is chief investment officer; David G. Booth is client contact.

Disciplined Portfolio Management Inc.

19 Center St., Chatham, N.J. 07928;
(201) 635-0518

Total assets managed	$60,000,600
Discretionary tax-exempt	$0
No. of portfolio managers	3

Disciplined Portfolio Management Inc., an active equity manager, uses a top-down analytical approach to identify major themes in combination with a quantitative approach to select attractive stocks. The process is reinforced by a rigorous sell discipline.

Darley T. Randall is chief investment officer; P. Drew Rankin and Mary P. Sherry are client contacts.

Discount Corp. of New York Advisers

58 Pine St., New York, N.Y. 10005;
(212) 248-8989

Total assets managed	$5,921,000,000
Total discretionary assets	$5,921,000,000
Total discretionary tax-exempt	$5,921,000,000
401(k)/457 assets managed	$140,000,000
Types of accounts managed	CEF
Tax-exempt clients	19
Minimum separate bond account	$50,000,000
Minimum separate cash account	$100,000,000
Minimum separate global account	$25,000,000
No. of portfolio managers	5
Size of research staff	17

Discount Corp. of New York Advisers is an active fixed-income, active international/global fixed-income and short-term manager.

The firm's fixed-income strategy is to hold obligations of the highest credit quality and to shift into securities of greater or lesser market risk as a downward or upward shift in interest rates is anticipated. Portfolio positions can be adjusted quickly in an attempt to protect assets from capital erosion or to benefit from a profit opportunity.

Patricia Klink is chief investment officer and client contact.

Dodge & Cox

1 Post St., 35th Floor, San Fransisco,
Calif. 94104; (415) 981-1710

Total assets managed	$7,313,000,000
Total discretionary assets	$7,313,000,000
Discretionary tax-exempt	$6,200,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	112
Minimum separate account	$20,000,000
No. of portfolio managers	10
Size of research staff	10

Dodge & Cox is an active equity, active fixed-income and balanced manager.

It takes a fundamental value, diversified approach to equities, investing in established companies that managers believe have positive earnings prospects not reflected in current prices.

Its fixed-income approach focuses on identifying undervalued market sectors and securities to construct high-quality, diversified portfolios. Maturities are gradually adjusted within a range of nine to 15 years. Interest rate anticipation is used.

Joseph M. Fee is chief investment officer; Kenneth E. Oliver is client contact.

Dollins Symons Management Inc.

1409 Terrace Drive, Pittsburgh, Pa.
15228; (412) 344-3764

Total assets managed	$8,000,000
Total discretionary assets	$8,000,000
Discretionary tax-exempt	$6,000,000
Types of accounts managed	CF
Tax-exempt clients	16
Minimum separate account	$100,000
No. of portfolio managers	2

25 largest equity real estate managers

Firm	$ mils.*
Equitable Real Estate	15,645
Copley Real Estate	9,500
JMB Institutional	8,639
Heitman Advisory	5,715
Prudential Realty	5,431
Aetna Life	4,519
TCW Realty	3,165
RREEF Funds	2,985
Corporate Property	2,700
LaSalle Advisors	2,400
CIGNA Asset	2,232
F.I.A. Associates	2,203
G.E. Investment	2,094
Jones Lang Wootton	2,000
J.P. Morgan	1,891
Yarmouth Group	1,650
Sentinel Real Estate	1,618
O'Connor Group	1,600
Public Storage	1,152
Trammell Crow Realty	1,119
Boston Co.	1,098
Metropolitan Life	978
Lomas Advisors	901
Aldrich, Eastman & Waltch	900
Cabot, Cabot & Forbes	850
Total	**82,985**

*Discretionary, tax-exempt assets

Dollins Symons Management Inc. is an active equity, passive fixed-income and balanced manager.

Its equity approach is quantitative, emphasizing low p/e stocks. The firm analyzes financial data as a function of change in stock price.

In fixed-income, it invests in high-quality obligations with average maturities of three years or less.

Charles C. Dollins is chief investment officer; Edward L. Symons Jr. is client contact.

Dominion Trust Co.-Capital Management Group

213 S. Jefferson St., Box 13327,
Roanoke, Va. 24040; (703)
365-6311

Total assets managed	$615,000,000
Total discretionary assets	$615,000,000
Discretionary tax-exempt	$441,000,000
Pooled accounts	$189,000,000
Separate accounts	$252,000,000
401(k)/457 assets managed	$196,000,000
Tax-exempt clients	
Commingled	529
Separate	32
Types of accounts managed	CEFGU
Minimum separate account	$2,000,000
No. of portfolio managers	3

Dominion Trust Co. — Capital Management Group is an active equity, active fixed-income, balanced, short-term, stable capital and GIC manager.

In equities, it purchases low p/e stocks of financially strong companies with higher-than-average dividends and earnings growth prospects.

It has two fixed-income approaches: Active duration management seeks to maximize total return through limited interest rate anticipation and moderate sector rotation; stable capital management has short duration portfolios for principal stability.

Peter F. Dawyot is chief investment officer; Peter D. Hartman is client contact.

Carl Domino Associates L.P.

5 Harvard Circle, Suite 9, West Palm
Beach, Fla. 33409; (407) 697-2723

Total assets managed	$167,000,000
Total discretionary assets	$167,000,000
Discretionary tax-exempt	$115,000,000
Types of accounts managed	CFGU
Tax-exempt clients	11
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	3

Carl Domino Associates L.P. is an active equity, active fixed-income and balanced manager.

Its equity approach uses fundamental analysis to identify undervalued, high-yield equities. Its fixed-income approach uses interest rate anticipation and sector analysis. Capital preservation is stressed.

Carl J. Domino is chief investment officer; Thomas J. Walsh is client contact.

Dougery, Wilder & Howard

2003 Landings Drive, Mountain View,
Calif 94043 (415) 968-4820

Total assets managed	$131,000,000
Total discretionary assets	$131,000,000
Discretionary tax-exempt	$102,000,000
Types of accounts managed	CF
Tax-exempt clients	45
Minimum separate account	$500,000
No. of portfolio managers	3
Size of research staff	2

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: Government
U: Union

Dougery, Wilder & Howard, a venture capital and growth stock manager, invests in small to medium-size companies that demonstrate outstanding growth potential.

John R. Dougery is chief investment officer and client contact.

Douglas Capital Management Inc.

2509 Southern Bell Tower,
Jacksonville, Fla. 32202; (904)
358-7866

Total assets managed	$213,000,000
Total discretionary assets	$213,000,000
Discretionary tax-exempt	$192,000,000
Types of accounts managed	CEGU
Tax-exempt clients	26
Minimum separate account	$300,000
No. of portfolio managers	3

Douglas Capital Management Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its primary equity approach is value oriented, focusing on low p/e stocks. Its fixed-income approach uses interest rate anticipation.

G. Bruce Douglas is chief investment officer and client contact.

Douglas, Noyes & Co. Inc.

50 Broad St., New York, N.Y. 10004;
(212) 668-3040

Total assets managed	$108,000,000
Total discretionary assets	$108,000,000
Discretionary tax-exempt	$14,000,000
Types of accounts managed	CF
Tax-exempt clients	7
Minimum separate account	$250,000
No. of portfolio managers	4
Size of research staff	1

Douglas, Noyes & Co. Inc., an active equity manager, focuses on growth stocks. It seeks companies that are leaders in an industry or segment of an industry with growth in earnings and unit volume at least twice the riskless rate.

James A.M. Douglas is chief investment officer; Cecilia E. Jacobs is client contact.

Dreman Value Management

70 Pine St., New York, N.Y. 10270;
(212) 785-0202

Total assets managed	$4,491,000,000
Total discretionary assets	$4,491,000,000
Discretionary tax-exempt	$3,495,000,000
International equity assets	$444,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	211
Minimum separate account	$5,000,000
No. of portfolio managers	15

Dreman Value Management L.P. is an active equity, active fixed-income and balanced manager.

Its equity approach is to invest in undervalued, low p/e stocks with high yields and solid fundamentals. The fixed-income approach uses interest rate anticipation and focuses on safety of principal and yield.

David N. Dreman is chief investment officer; Murat H. Davidson Jr. and Lewis W. Parker are client contacts.

Dreyfus Management Inc.

767 Fifth Ave., New York, N.Y. 10153;
(212) 715-6454

Total assets managed	$1,658,000,000
Total discretionary assets	$1,603,000,000
Discretionary tax-exempt	$1,603,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	42
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	3

Dreyfus Management Inc. is an active equity, active fixed-income, balanced, short-term and small-cap equity manager.

Its value-oriented, low p/e and contrarian equity approach blends top-down/bottom-up styles with stock selection and asset mix decisions being the most important, followed by industry or sector weight.

Its primary fixed-income approach is based on maturity or duration management. Using high-quality short/intermediate issues, the maximum average maturity is 10 years, with normal average maturity equal to the risk-adjusted peak of the yield curve.

Peter A. Santoriello is chief investment officer; Edward V. Arbaugh III is client contact.

Dreyfus Realty Advisors Inc.

1180 Avenue of the Americas, New
York, N.Y. 10036; (212) 764-3210

Total assets managed	$535,000,000
Total discretionary assets	$535,000,000
Discretionary tax-exempt	$535,000,000
Equity real estate assets	$500,000,000
Mortgage assets	$35,000,000
Types of accounts managed	C
Tax-exempt clients	1
Minimum separate account	$10,000,000

Dreyfus Realty Advisors Inc., a real estate manager, uses an opportunistic approach with investment decisions based on a broad assessment of economic and capital market trends and real estate conditions.

Francis X. Tansey is chief investment officer; Paul McEvoy is client contact.

Duff & Phelps Investment Management Co.

55 E. Monroe St., Suite 3800,
Chicago, Ill. 60603; (312) 368-5500

Total assets managed	$8,971,000,000
Total discretionary assets	$8,971,000,000
Discretionary tax-exempt	$8,971,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	118
Minimum separate account	$5,000,000
No. of portfolio managers	18
Size of research staff	110

Duff & Phelps Investment Management Co. is an active equity, active and passive fixed-income and balanced manager.

Its equity approach employs bottom-up research, emphasizing stocks with low p/e multiples, high-dividend income and above-average return on equity. Graham & Dodd analysis is used.

Its fixed-income approach stresses preservation of capital and generation of income using high-quality issues. Maturity distribution is based on interest rate forecasts.

Robert D. Milne is chief investment officer; David A. Dahl is client contact.

Dunedin Fund Managers Ltd.

25 Ravelston Terrace, Edinburgh EH4
3EX, U.K.; 031-315-2500

Total assets managed	$5,122,000,000
Total discretionary assets	$5,122,000,000
Discretionary tax-exempt	$171,000,000
International equity assets	$140,000,000
International fixed-income assets	$2,000,000
International cash assets	$6,000,000
Types of accounts managed	C
Tax-exempt clients	3
Minimum separate account	$10,000,000
No. of portfolio managers	21
Size of research staff	15

Dunedin Fund Managers Ltd. is an active international/global equity and fixed-income manager.

Its equity approach emphasizes high-quality growth companies. Equal weight is placed on country currency and stock selection. Options are used.

Its fixed-income approach uses sector analysis. Maturity and country allocation is determined monthly based on views of world economies, interest rates and currency movements.

Alan S. Kemp is chief investment officer and client contact.

Durkee Capital Management

155 Federal St., Boston, Mass. 02110;
(617) 451-5445

Total assets managed	$286,000,000
Total discretionary assets	$286,000,000
Total discretionary tax-exempt	$286,000,000
Types of accounts managed	CG
Tax-exempt clients	6
Minimum separate account	$20,000,000
No. of portfolio managers	1
Size of research staff	1

Durkee Capital Management, an active fixed-income manager, follows a systematic quantitative technique derived from options-pricing methodology. This approach uses convexity and duration to create an optimal portfolio in response to observed price changes.

Edward R. Durkee is chief investment officer; Carole Dunn is client contact.

E

Eager Street Asset Management

12 E. Eager St., Baltimore, Md. 21202;
(301) 727-3620

Total assets managed	$7,000,000
Total discretionary assets	$7,000,000
Discretionary tax-exempt	$7,000,000
Equity indexed assets	$3,000,000
Fixed-income indexed assets	$4,000,000
Types of accounts managed	C
Tax-exempt clients	5
Minimum separate account	$250,000
No. of portfolio managers	1

Eager Street Asset Management is an active equity, balanced, tactical asset allocation and ESOP rollover manager.

Its quantitative equity approach bases asset allocation client's requirement for safety of principal. The firm seeks to optimize returns using MPT. Its fixed-income approach uses interest rate anticipation.

M. Barry Strudwick is chief investment officer and client contact.

Eagle Asset Management

880 Carillon Parkway, St. Petersburg,
Fla. 33716; (800) 237-3101

Total assets managed	$3,629,000,000
Total discretionary assets	$3,629,000,000
Discretionary tax-exempt	$2,168,000,000
401(k)/457 assets managed	$47,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	81
Minimum separate account	$5,000,000
No. of portfolio managers	8
Size of research staff	2

Eagle Asset Management, an active equity manager, relies heavily on cash flow analysis. The firm invests primarily in non-technology growth stocks with a significant value component.

Herbert E. Ehlers is chief investment officer; Lincoln Kinnicutt, is client contact.

Eastbridge Capital Inc.

885 Third Ave., New York, N.Y. 10022;
(212) 230-3350

Total assets managed	$50,000,000
Discretionary tax-exempt	$0
Minimum separate account	$10,000,000
No. of portfolio managers	2
Size of research staff	2

Eastbridge Capital Inc. is an active fixed-income manager.

Its fixed-income approach is quantitative, using interest rate anticipation and sector analysis. The firm pursues superior returns from high-grade bonds by means of aggressive management within carefully defined risk parameters. It emphasizes MBS, quantitative analysis of relative value and proprietary optimization models.

Paul Derosa is chief investment officer; George D. Hawes is client contact.

Mutual funds: June 11

Eastdil Realty Inc.

40 W. 57th St., New York, N.Y. 10019;
(212) 315-7200

Total assets managed	$2,806,000,000
Total discretionary assets	$520,000,000
Discretionary tax-exempt	$520,000,000
Equity real estate assets	$460,000,000
Mortgage assets	$60,000,000
Types of accounts managed	CG
Tax-exempt clients	2
Minimum separate account	$100,000,000
No. of portfolio managers	5

Eastdil Realty Inc., a real estate manager, focuses on innovative acquisition techniques and in-depth asset management. The objective is to achieve a competitive real rate of return over the long term through the enhancement of property value.

Benjamin V. Lambert is chief investment officer; Jeffery H. Cooper, Robert T. Davis, Thomas M. Yamin, Steven A. Karpf and Roy H. March are client contacts.

Eaton Vance Management

24 Federal St., Boston, Mass. 02110;
(617) 482-8260

Total assets managed	$7,282,000,000
Total discretionary assets	$7,110,000,000
Discretionary tax-exempt	$1,062,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	96
Minimum separate equity account	$2,000,000
Minimum separate bond account	$5,000,000
No. of portfolio managers	12
Size of research staff	8

Eaton Vance Management Inc. is an active equity, active fixed-income, balanced and high-yield bond manager.

The firm's equity style relies on fundamental bottom-up analysis performed by an internal research staff. While maintaining a growth bias to its stock selection, other issues often will be used. Options are used.

Its fixed-income approach seeks to achieve superior returns while preserving capital and reducing portfolio volatility. Although moderate interest rate anticipation and sector rotation are practiced, heavy emphasis is placed on convexity analysis utilizing put bonds.

Peter F. Kiely is chief investment officer; James M. Frost is client contact.

Economic Resources Corp.

2600 Industry Way, Lynwood, Calif.
90262; (213) 537-4610

Total assets managed	$9,000,000
Total discretionary assets	$2,000,000
Total discretionary tax-exempt	$200,000
Types of accounts managed	FG
Tax-exempt clients	2
Minimum separate account	$200,000
No. of portfolio managers	3
Size of research staff	5

Economic Resources Corp. is a venture capital manager.

It makes direct equity investments and uses subordinated debt with warrants for minority-oriented acquisitions and expansion financings for established and emerging high-growth manufacturing concerns.

Lance Drummond is chief investment officer; Kenneth T. Lombard is client contact.

The Edgecombe Group

196 Adelaide St. W., Toronto, Ontario
M5H 1W7; (416) 977-1980

Total assets managed	$854,000,000
Total discretionary assets	$854,000,000
Discretionary tax-exempt	$154,000,000
For subsidiaries of U.S. firms	$6,000,000
Equity real estate assets	$154,000,000
Tax-exempt clients	71
U.S. subsidiaries	3
Types of accounts managed	CGU
Minimum separate account	$25,000,000

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investors who need firm control
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and maximize returns
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For more information please contact
Carl Desch, Vice President (212) 648-3175

No. of portfolio managers	4
Size of research staff	3

The Edgecombe Group, a Canadian firm, is a real estate manager. Its investment approach stresses proactive asset management, using property development, expansion, renovation, conversion of use and leasing re-leasing capabilities to enhance a property's value beyond general market increases.

Kent Taylor is chief investment officer; Michael Walsh is client contact.

Edgewood Management Co.

675 Third Ave., New York, N.Y. 10017;
(212) 687-7480

Total assets managed	$455,000,000
Total discretionary assets	$300,000,000
Discretionary tax-exempt	$36,000,000
International equity assets	$1,000,000
Types of accounts managed	CF
Tax-exempt clients	19
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	2

Edgewood Management Co. is an active equity, active fixed-income and balanced manager.

Its equity approach stresses growth stocks; its fixed-income approach uses interest rate anticipation and sector analysis.

William C. Breed III is chief investment officer; Nicholas A. Stephens is client contact.

Edinburgh-Wilmington International Capital Management

1100 N. Market St., Wilmington, Del.
19801; (302) 651-8036

Total assets managed	$100,000,000
Total discretionary assets	$100,000,000
Discretionary tax-exempt	$7,000,000
International equity assets	$7,000,000
Types of accounts managed	CF
Tax-exempt clients	2
Minimum separate account	$5,000,000
No. of portfolio managers	30

Edinburgh-Wilmington International Capital Management, an active international/global equity manager, stresses emerging growth and core management. The firm uses top-down geographical asset allocation, intra-regional sector selection and bottom-up stock selection. Options are used.

Iain Watt is chief investment officer; Gloria E. Carlson is client contact.

1838 Investment Advisors

1 Meridian Plaza, Philadelphia, Pa.
19102; (215) 963-3525

Total assets managed	$3,515,000,000
Total discretionary assets	$2,940,000,000
Discretionary tax-exempt	$1,810,000,000
401(k)/457 assets managed	$70,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	117
Minimum separate account	$5,000,000
No. of portfolio managers	15

1838 Investment Advisors is an active equity, active fixed-income and balanced manager.

Its equity approach focuses on relative value. The firm believes a disciplined approach that concentrates portfolios in undervalued and out-of-favor securities will provide above-market returns at below-market levels of risk.

Its primary fixed-income approach seeks opportunities through credit and market inefficiencies and cyclical and technical trends. The firm uses these opportunities to add incremental value with each transaction without significant changing risk, maturity or income levels.

W. Thacher Brown is chief investment officer; John Springrose is client contact.

Elliott & Page Atlantic Ltd.

1801 Hollis St., Suite 310, Halifax,
Nova Scotia B3J 3N4; (902)
423-9367

Total assets managed	$215,000,000
Total discretionary assets	$215,000,000
Discretionary tax-exempt	$203,000,000
For subsidiaries of U.S. firms	$1,000,000
Non-North American equities	$1,000,000
Tax-exempt clients	17
U.S. subsidiaries	1
Types of accounts managed	CEFGU
Minimum separate account	$1,000,000
No. of portfolio managers	3

Elliott & Page Atlantic Ltd., a Canadian firm, is an active equity, active fixed-income, balanced and short-term manager.

Its bottom-up equity approach is value-oriented, focusing on the ability of management, balance sheet strength and growth opportunity. Fixed income is managed according to the firm's intermediate and secular view of interest rates.

G. Peter Marshall and Robert G. McKim are chief investment officers; Kimberley Charlesworth, is client contact.

Elliott & Page Investment Counsel

120 Adelaide St. W., Suite 1120,
Toronto, Ontario M5H 1V1; (416)
365-8300

Total assets managed	$4,100,000,000
Discretionary tax-exempt	$850,000,000
For subsidiaries of U.S. firms	$50,000,000
Tax-exempt clients	71
U.S. subsidiaries	2
Types of accounts managed	CGU
Minimum separate account	$3,000,000
No. of portfolio managers	17
Size of research staff	2

Elliott & Page Investment Counsel, a Canadian firm, is a an active equity, active fixed-income, balanced and short-term manager.

Its primary equity approach is value-oriented, with some sector rotation and emerging growth focus. Its fixed-income approach uses interest rate anticipation and sector analysis. Issue quality and liquidity are emphasized.

Morton Patrontasch is chief investment officer; Ian H. Taylor is client contact.

Emerging Markets Management/Emerging Markets Investors Corp.

2000 K St., N.W., Suite 400,
Washington, D.C. 20006; (202)
785-4100

Total assets managed	$302,000,000
Total discretionary assets	$302,000,000
Discretionary tax-exempt	$155,000,000
International equity assets	$147,000,000
Types of accounts managed	CF
Tax-exempt clients	12
Minimum separate account	$15,000,000
No. of portfolio managers	3
Size of research staff	4

Emerging Markets Management/Emerging Markets Investors Corp., an active international equity manager, uses a quantitative approach, focusing on value and growth.

Antoine W. Van Agtmael is chief investment officer and client contact.

EMG Advisors Inc.

57 Unquowa Road, Fairfield, Conn.
06430; (203) 255-5701

Total assets managed	$96,000,000
Total discretionary assets	$96,000,000
Total discretionary tax-exempt	$94,000,000
401(k)/457 assets managed	$5,000,000
Types of accounts managed	CGU
Tax-exempt clients	11
Minimum separate account	$2,000,000
No. of portfolio managers	1
Size of research staff	1

EMG Advisors Inc. is an active fixed-income manager that invests in U.S. Treasury and mortgage-backed securities. The firm allocates funds between fixed- and variable-rate securities as a function of the yield curve level and trend of interest rates.

William H. Hatch III is chief investment officer and client contact.

EMP Capital Management

707 E. Main St., Richmond, Va.
23219; (800) 456-8585

Total assets managed	$125,000,000
Total discretionary assets	$125,000,000
Discretionary tax-exempt	$125,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	11
Minimum separate account	$2,500,000
No. of portfolio managers	2
Size of research staff	1

EMP Capital Management is an active equity, active fixed-income and balanced manager.

Its equity approach identifies stocks with accelerating earnings momentum; buy disciplines and fundamental judgment are applied. For fixed-income, defensive portfolios are constructed using a laddered structure and moderate shifts of maturity in the intermediate range.

Lawrence B. Whitlock Jr. is chief investment officer; A. Gordon Goodykoontz is client contact.

Emprise Bank

20 W. Second St., Hutchinson, Kan.
67501; (316) 662-0561

Total assets managed	$195,000,000
Total discretionary assets	$100,000,000
Discretionary tax-exempt	$33,000,000
Pooled accounts	$18,000,000
Separate accounts	$15,000,000
Tax-exempt clients:	
Commingled	39
Separate	12
Types of accounts managed	CEFGU
Minimum separate account	$300,000
No. of portfolio managers	5
Size of research staff	3

Emprise Bank, formerly Hutchinson National Bank, is an active equity, active fixed-income, balanced and short-term manager.

Its value-oriented equity approach is top-down, employing sector rotation, market timing/tactical asset allocation and Graham & Dodd analysis; out-of-favor equities are emphasized. Options are used, with occasional use of financial futures.

Its fixed-income approach uses interest rate anticipation and anticipates yield curve changes.

Of the $35 million in institutional discretionary tax-exempt assets for which the bank has investment responsibility, $33 million was managed internally by the bank and $2 million was assigned to external investment firms.

Dale E. Page is chief investment officer and client contact.

Roger Engemann & Associates Inc.

600 N. Rosemead Blvd., Pasadena,
Calif. 91107; (818) 351-9686

Total assets managed	$579,000,000
Total discretionary assets	$319,000,000
Total discretionary tax-exempt	$260,000,000
Types of accounts managed	CEF
Tax-exempt clients	512
Minimum separate account	$100,000
No. of portfolio managers	3
Size of research staff	4

Roger Engemann & Associates Inc., an active equity manager, uses independent, fundamental research to find companies that have strong management, sound business plans and superior potential for earnings growth.

Roger Engemann is chief investment officer; James C. Kemp, Stephen Ascher and William Richards are client contacts.

Equitable Agri-Business

1040 Crown Pointe Parkway, Suite
780, Atlanta, Ga. 30338; (404)
551-2700

Total assets managed	$2,229,000,000
Total discretionary assets	$2,229,000,000
Discretionary tax-exempt	$813,000,000
Equity real estate assets	$73,000,000
Mortgage assets	$740,000,000
Types of accounts managed	C

Equitable Agri-Business Inc., a real estate manager, uses careful selection of prime income-producing agricultural properties with geographic, property and crop diversification, including citrus groves, orchards, vineyards, timberlands, farms and ranches.

Norman G. Yergen is chief investment officer; Joyce Niggley is client contact.

Equitable Capital Management Corp.

1285 Avenue of the Americas, New
York, N.Y. 10019; (212) 554-2000

Total assets managed	$38,124,000,000
Total discretionary assets	$38,103,000,000
Discretionary tax-exempt	$27,067,000,000
401(k)/457 assets managed	$600,000,000
Equity real estate	$74,000,000
International equity assets	$49,000,000
Equity indexed assets	$30,000,000
Fixed-income indexed assets	$100,000,000
Dedicated/immunized assets	$600,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	529
Minimum separate account	$10,000,000
No. of portfolio managers	28
Size of research staff	18

Equitable Capital Management Corp. is an active and passive equity, active and passive fixed-income, balanced, real estate, active international equity, short-term, direct placements, leveraged buy-out, options and futures and convertibles manager.

The firm's investment approach is client-driven, problem-solving because each plan differs in liability structure, risk tolerance and asset mix. It uses traditional and non-traditional asset management techniques and products.

Brian F. Wruble is chief investment officer; Linda Shrader and Jane Dubin are client contacts.

Equitable Real Estate Investment Management

3414 Peachtree Road N.E., Atlanta,
Ga. 30326-1162; (404) 239-5008

Total assets managed	$35,431,000,000
Total discretionary assets	$35,404,000,000
Discretionary tax-exempt	$20,054,000,000
401(k)/457 assets managed	$26,000,000
Equity real estate assets	$15,645,000,000
Mortgage assets	$4,409,000,000
Tax-exempt clients	299
Types of accounts managed	CGU
No. of portfolio managers	15
Size of research staff	6

Equitable Real Estate Investment Management Inc., a real estate manager, acquires ownership and debt positions in diversified, quality, well-located properties with the potential for growth in rental income and value appreciation.

George R. Puskar is chief investment officer; Paul J. Dolinoy is client contact.

Equitec Institutional Realty Advisers Inc.

7677 Oakport St., P.O. Box 2470,
Oakland, Calif. 94614; (415)
430-9900

Total assets managed	$3,700,000,000
Total discretionary assets	$123,000,000
Discretionary tax-exempt	$123,000,000
Equity real estate assets	$123,000,000
Types of accounts managed	CGU
Tax-exempt clients	21
Minimum separate account	$10,000,000
No. of portfolio managers	2

Equitec Institutional Realty Advisers Inc., a real estate manager, acquires and manages high-quality, income-producing commercial property. Properties are liquidated within five to 10 years, primarily on an all-cash basis.

Richard L. Saalfeld and Glen H. Smith are chief investment officers; Mack Clapp is client contact.

Equity Investment Corp.

5180 Roswell Road, Suite 203-S,
Atlanta, Ga. 30342; (404) 250-9565

Total assets managed	$30,000,000
Total discretionary assets	$30,000,000
Discretionary tax-exempt	$15,000,000
Types of accounts managed	CEFU
Tax-exempt clients	31
Minimum separate account	$250,000
No. of portfolio managers	1

Equity Investment Corp., an active equity manager, follows a strict investment discipline using a computerized valuation methodology based on principles espoused by W. Buffet. The use of this model leads to the ownership of companies with high returns on equity, high growth, low debt and low p/es.

James F. Barksdale is chief investment officer and client contact.

ERIAC Inc.

555 Madison Ave. New York, N.Y.
10022; (212) 371-3950

Total assets managed	$40,000,000
Total discretionary assets	$40,000,000
Discretionary tax-exempt	$40,000,000
Types of accounts managed	CEF
Tax-exempt clients	40
Minimum separate account	$250,000
No. of portfolio managers	3
Size of research staff	3

ERIAC Inc. is an active equity, passive fixed-income and balanced manager.

Its equity approach evaluates earnings, corporate management and growth opportunities, and uses fundamental analysis. Its primary fixed-income position is passive; however, interest rate anticipation is used for timing and maturity decisions.

Bernard Herold is chief investment officer; Lawrence Herold is client contact.

Essex Investment Management Co. Inc.

10 Post Office Square, Boston, Mass.
02109; (617) 482-4870

Total assets managed	$918,000,000
Total discretionary assets	$918,000,000
Discretionary tax-exempt	$642,000,000
Types of accounts managed	CEF
Tax-exempt clients	45
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	6

Essex Investment Management Co. Inc. is an active equity, active fixed-income, balanced and hedge products manager.

Its equity approach emphasizes emerging growth and small-cap stocks. Its fixed-income approach employs moderate market timing.

Joseph C. McNay is chief investment officer; Stephen D. Cutler is client contact.

Estabrook Capital Management Inc.

430 Park Ave., New York, N.Y. 10022;
(212) 319-4343

Total assets managed	$800,000,000
Total discretionary assets	$803,000,000
Discretionary tax-exempt	$580,000,000
401(k)/457 assets managed	$25,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	200
Minimum separate account	$500,000
No. of portfolio managers	7

Estabrook Capital Management Inc. is an active equity, active fixed-income and balanced manager.

Its value approach to equities stresses selection based on projections of total return over a stock market cycle. Emphasis is on potential growth in earnings and dividends, underlying asset worth and fundamental value.

Its fixed-income approach uses interest rate anticipation, limiting investments to government and government-guaranteed issues, and to corporates and municipals rated A or higher.

Charles T. Foley is chief investment officer; William C. Petty III is client contact.

Evans & Moxon Capital Management Inc.

33 S. Delaware Ave, Yardley, Pa.
19067; (215) 493-0500

Total assets managed	$266,000,000
Total discretionary assets	$256,000,000
Discretionary tax-exempt	$256,000,000
Types of accounts managed	CEF
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	1

Evans & Moxon Capital Management Inc. is an active equity, active fixed-income, balanced and short-term cash manager.

Its equity approach emphasizes midsize growth companies ($100 million to $1.5 billion) within industries experiencing above-average growth. In fixed-income, the firm uses yield curve and yield spread analysis to try to outperform the market by 2% to 3% annually.

John Moxon is chief investment officer and client contact.

Evergreen Asset Management Inc.

1001 Fourth Ave., Suite 3200, Seattle,
Wash. 98154; (206) 224-9914

Total assets managed	$50,000,000
Total discretionary assets	$50,000,000
Discretionary tax-exempt	$50,000,000
Types of accounts managed	U
Tax-exempt clients	15
Minimum separate account	$1,000,000
No. of portfolio managers	1

Evergreen Asset Management Inc. is a short-term cash manager, using a one- to three-year maturity structure, which is determined through interest rate anticipation and sector analysis.

Elana D. Russell is chief investment officer and client contact.

Excalibur Management Corp.

121 High St., Boston, Mass. 02110;
(617) 451-6707

Total assets managed	$217,000,000
Total discretionary assets	$217,000,000
Discretionary tax-exempt	$85,000,000
Types of accounts managed	CEF
Tax-exempt clients	45
Minimum separate account	$1,000,000
No. of portfolio managers	4

Excalibur Management Corp. is a balanced manager.

A top-down monetary/economic analysis guides asset allocation. Appropriate sectors and stock selection follow, focusing on growth and emerging growth stocks. Its fixed-income approach is based on interest rate anticipation, with investments focused on the most attractive area of the yield curve relative to rate trends.

Michael A. Delduchetto is chief investment officer; John K. Beeten is client contact.

F

FBW Investment Management

1720 Eye St. N.W., Washington, D.C.
20006; (202) 429-3637

Total assets managed	$258,000,000
Total discretionary assets	$204,000,000
Discretionary tax-exempt	$142,000,000
401(k)/457 assets managed	$3,000,000
Types of accounts managed	CEFU
Tax-exempt clients	45
Minimum separate account	$3,000,000
No. of portfolio managers	3
Size of research staff	3

FBW Investment Management is an active equity, active fixed-income, balanced and short-term manager.

The firm employs a matrix of growth, value, income and special situation stocks in a top-down approach.

For fixed-income, it modifies portfolio term structure as dictated by interest rate forecasts.

Anthony J. Sulvetta is chief investment officer; Krista Eveland is client contact.

Florence Fearrington Inc.

90 Broad St., New York, N.Y. 10004;
(212) 480-9020

Total assets managed	$119,000,000
Discretionary tax-exempt	$31,000,000
Types of accounts managed	CEF
Tax-exempt clients	8
Minimum separate account	$2,000,000
No. of portfolio managers	2

Florence Fearrington Inc., an active equity and balanced manager, employs a value-oriented equity approach using Graham & Dodd analysis. The firm purchases only individual securities when they appear distinctly undervalued in the market in relation to their intrinsic value. In fixed-income, the firm's purchases are regarded as long-term investments.

James W. Needham is chief investment officer; Florence Fearrington is client contact.

Federated Investment Counseling

Federated Investors Tower,
Pittsburgh, Pa. 15222; (412)
288-6588

Total assets managed	$986,000,000
Total discretionary assets	$986,000,000
Discretionary tax-exempt	$940,000,000
401(k)/457 assets managed	$26,000,000
Types of accounts managed	CEFG
Tax-exempt clients	52
Minimum separate account	$10,000,000
No. of portfolio managers	6
Size of research staff	2

Federated Investment Counseling is an active equity, active fixed-income and balanced manager.

The firm's equity approach is value-oriented, concentrating in big-cap, high-quality stocks with a moderate asset allocation decision.

Its fixed-income approach focuses on interest rate anticipation. Accounts are managed with a duration target and a government/corporate upgrade/downgrade decision.

Henry J. Gailliot is chief investment officer; James H. O'Leary is client contact.

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: Government
U: Union

Fenimore Asset Management Inc.

P.O. Box 310, Cobleskill, N.Y. 12043;
(518) 234-4393

Total assets managed	$73,000,000
Total discretionary assets	$71,000,000
Discretionary tax-exempt	$14,000,000
Types of accounts managed	CF
Tax-exempt clients	55
No. of portfolio managers	2

Fenimore Asset Management Inc. is an active equity and balanced manager.

Its equity approach is value-oriented with a long-term focus, using quantitative techniques and focusing on growth stocks.

Its fixed-income approach, based on interest rate anticipation, is to invest in bonds with ratings of A or better and maturities of two to five years.

Thomas O. Putnam is chief investment officer; Diane C. Van Buren is client contact.

Ferguson Investment Consultants Inc.

528 Bellwood Ave., North Tarrytown,
N.Y. 10591; (914) 631-7188

Total assets managed	$6,000,000
Total discretionary assets	$6,000,000
Discretionary tax-exempt	$1,000,000
Types of accounts managed	C
Tax-exempt clients	10
Minimum separate account	$100,000
No. of portfolio managers	1

Ferguson Investment Consultants Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach is based on fundamental, value-oriented analysis combined with quantitative inputs.

Its fixed-income approach is based on risk/return analysis from long-term interest rate trends. The firm evaluates quality and corporate liquidity to assess the attractiveness of higher yielding securities.

Douglas E. Ferguson is chief investment officer and client contact.

Ferguson & Wellman Inc.

1001 S.W. Fifth Ave., Suite 1919,
Portland, Ore. 97204; (503)
226-1444

Total assets managed	$600,000,000
Total discretionary assets	$600,000,000
Discretionary tax-exempt	$430,000,000
Types of accounts managed	CEFU
Tax-exempt clients	85
Minimum separate account	$1,000,000
No. of portfolio managers	6

Ferguson & Wellman Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its primary equity approach is disciplined, using Graham & Dodd principles, low p/e stocks and sector rotation. Value is emphasized, focusing on companies with a potential for earnings growth and dividend increases.

Its primary fixed-income approach uses interest rate anticipation and sector analysis, with portfolios structured to emphasize maturities, relative value between sectors and quality levels.

Norbert J. Wellman, Roger Van Winkle, L. Wayne Purdy, H. Joseph Ferguson and James H. Rudd are chief investment officers; Steve Holwerda is client contact.

FFCA Institutional Advisors

3443 N. Central Ave., Phoenix, Ariz.
85012; (602) 264-9639

Total assets managed	$1,200,000,000
Total discretionary assets	$1,200,000,000
Discretionary tax-exempt	$250,000,000
401(k)/457 assets managed	$20,000,000
Equity real estate assets	$250,000,000
Types of accounts managed	CFGU
Tax-exempt clients	16
Minimum separate account	$50,000,000
No. of portfolio managers	3
Size of research staff	4

FFCA Institutional Advisors Inc., a real estate manager, emphasizes high current income yields from unleveraged commercial real estate employed by fundamental industries.

Robin Roach is chief investment officer; Thomas K. Crawford is client contact.

F.I.A. Associates Inc.

1601 Response Road, Suite 300,
Sacramento, Calif. 95815; (916)
920-4051

Total assets managed	$2,371,000,000
Total discretionary assets	$2,371,090,000
Discretionary tax-exempt	$2,371,000,000
Equity real estate assets	$2,203,000,000
Mortgage assets	$168,000,000
Types of accounts managed	G
Tax-exempt clients	6
Minimum separate account	$50,000,000
No. of portfolio managers	16

F.I.A. Associates Inc., a real estate manager, takes a conservative approach favoring up-and-going properties and emphasizing return on investment. Appreciation is secondary. Values are enhanced through intensive asset management.

Stephen A. Rosenthal is chief investment officer; Winston H. Hickox is client contact.

Fidelity Investments

82 Devonshire St., Boston, Mass.
02109; (617) 570-3336

Total assets managed	$97,660,000,000
Discretionary tax-exempt	$19,112,000,000
401(k)/457 assets managed	$7,007,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	2,800
No. of portfolio managers	54
Size of research staff	120

Fidelity Investments is an active and passive domestic equity and fixed-income, active international equity and fixed-income, balanced and short-term manager.

J. Gary Burkhead is chief investment officer; Robert L. Reynolds is client contact.

Fidelity Management Trust

82 Devonshire St., Boston, Mass.
02109; (617) 570-6161

Total assets managed	$11,176,000,000
Total discretionary assets	$11,176,000,000
Discretionary tax-exempt	$9,776,000,000
Pooled accounts	$2,506,000,000
Separate accounts	$7,270,000,000
401(k)/457 assets managed	$253,000,000
Mortgage assets	$45,000,000
International equity assets	$744,000,000
International cash assets	$14,000,000
Fixed-income indexed assets	$615,000,000
Dedicated/immunized assets	$269,000,000
Tax-exempt clients:	
Commingled	35
Separate	77
Types of accounts managed	CEFGU
Minimum separate account	$25,000,000
No. of portfolio managers	33
Size of research staff	110

Fidelity Management Trust Co. is an active equity, active and passive fixed-income, balanced and active international/global equity manager.

Six equity disciplines are offered: earnings growth; income-managed; select international; select equity; special equity; and long-term growth.

Three fixed-income styles are offered: dynamic maturity allocation; an active approach; high income bond; and structured management.

William L. Nemerever and Richard T. O'Rourke are chief investment officers; Eugene M. Waldron is client contact.

Fidelity Mutual Group

250 King of Prussia Road, Radnor, Pa.
19087; (215) 964-7275

Total assets managed	$1,157,000,000
Total discretionary assets	$231,000,000
Discretionary tax-exempt	$58,000,000
401(k)/457 assets managed	$9,000,000
Mortgage assets	$6,000,000
Dedicated/immunized assets	$52,000,000
No. of portfolio managers	3

Fidelity Mutual Group is a passive fixed income manager.

Donald L. Goetz is chief investment officer; Maurice L. Stewart is client contact.

Fiduciary Capital Management Inc.

51 Sherman Hill Road, Cornerstone
Professional Park, Suite A-204, P.O.
Box 893, Woodbury, Conn. 06798;
(203) 266-0440

Total assets managed	$1,200,000,000
Total discretionary assets	$400,000,000
Discretionary tax-exempt	$400,000,000
401(k)/457 assets managed	$400,000,000
Types of accounts managed	C
Tax-exempt clients	28
No. of portfolio managers	2
Size of research staff	3

Fiduciary Capital Management Inc. is a short-term, GIC and BIC manager.

Its fixed-income approach emphasizes high quality, using maturity ladders and duration shifts. The firm uses a highly-disciplined, low-risk GIC portfolio management style that achieves optimal investment performances tailored to plan needs. It structures portfolios to manage exposure to interest rate movement and reinvestment risk. The firm is an adviser to an additional $800 million in tax-exempt assets.

Peter E. Bowles is chief investment officer; Robert A. Madore is client contact.

Fiduciary Counsel Inc.

40 Wall St., New York, N.Y. 10005;
(212) 344-6400

Total assets managed	$750,000,000
Total discretionary assets	$500,000,000
Discretionary tax-exempt	$50,000,000
Types of accounts managed	EF
Tax-exempt clients	40
Minimum separate account	$1,000,000
No. of portfolio managers	5
Size of research staff	2

Fiduciary Counsel Inc. is a passive equity, passive fixed-income and balanced manager.

Its equity approach uses Graham & Dodd principles, sector rotation and market timing to invest in growth or emerging growth stocks with a lower than average p/e.

The parent is Associated Family Services.

Andrew E. Beer is chief investment officer; Annmarie C. Volpe is client contact.

Fiduciary Management Associates

55 W. Monroe St., Suite 2550,
Chicago, Ill. 60603; (312) 930-6850

Total assets managed	$1,100,000,000
Total discretionary assets	$1,045,000,000
Discretionary tax-exempt	$947,000,000
401(k)/457 assets managed	$7,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	102
Minimum separate equity account	$1,000,000
Minimum separate bond account	$2,000,000
No. of portfolio managers	7
Size of research staff	2

Fiduciary Management Associates is an active equity, active fixed-income and balanced manager.

Emphasizing growth and low p/e stocks and sector rotation, it is a top-down, macroeconomic equity manager, investing in well-managed, value-oriented companies.

Basing its fixed-income approach on interest rate anticipation and sector analysis, it uses top-down management, varying sector exposure and taking advantage of interest rate changes and yield spread variations.

Philip E. Arnold is chief investment officer; Robert F. Carr III is client contact.

Fiduciary Trust Co. International

2 World Trade Center, New York, N.Y.
10048; (212) 466-4100

Total assets managed	$10,005,000,000
Total discretionary assets	$10,005,000,000
Discretionary tax-exempt	$5,383,000,000
Pooled accounts	$46,000,000
Separate accounts	$5,337,000,000
401(k)/457 assets managed	$365,000,000
International equity assets	$403,000,000
International fixed-income assets	$470,000,000
Tax-exempt clients:	
Commingled	5
Separate	187
Types of accounts managed	CEFGU
Minimum separate account	$3,000,000
No. of portfolio managers	42
Size of research staff	10

Fiduciary Trust Co. International is an active domestic and international equity and fixed-income, balanced and real estate.

Its fundamental, long-term equity approach seeks to invest in companies with extraordinary operating results and p/e leverage potential; early identification of secular and cyclical changes is stressed. Convertible securities are used to provide yield support and to control volatility. Fixed-income guidelines, such as sector weighting and maturity/duration, are determined weekly through a top-down process that relies heavily on trend analysis of major factors affecting rates, most notably inflation, monetary and fiscal policy, and economic growth rates. Options and fixed-income futures are used.

In real estate, it uses a core/satellite approach, investing in high-quality properties with stabilized lease structures and adding undervalued properties around it. Renovation, re-leasing, repositioning and rehabilitation will be implemented to enhance value.

Jeremy H. Biggs is chief investment officer; Barbara G. Marcin is client contact.

The Fifth Third Bank

Fifth Third Center, Cincinnati, Ohio
45263; (513) 579-4236

Total assets managed	$17,400,000,000
Total discretionary assets	$4,650,000,000
Discretionary tax-exempt	$2,200,000,000
Pooled accounts	$336,000,000
Separate accounts	$1,864,000,000
401(k)/457 assets managed	$23,000,000
Real estate equity assets	$15,000,000
Mortgage assets	$20,000,000
International equity assets	$10,000,000
International fixed-income assets	$20,000,000
Tax-exempt clients:	
Commingled	288
Separate	61
Types of accounts managed	CEFGU
No. of portfolio managers	5
Size of research staff	6

The Fifth Third Bank is an active equity, active and passive fixed-income, balanced, real estate and short-term manager.

Its equity approach is fundamental. Emphasis is placed on well-managed firms that have a demonstrated track record of growing earnings and dividend performance. Options are used.

Its fixed-income approach focuses on maintaining principal stability, emphasizing portfolios with a weighted average maturity of seven years or less and a minimum average quality of AA.

P. Michael Brumm is chief investment officer; John B. Schmitz and John T. Clegg are client contacts.

Financial Aims Corp.

P.O. Box 5015, Great Falls, Mont.
59401; (406) 727-6111

Total assets managed	$140,000,000
Total discretionary assets	$140,000,000
Discretionary tax-exempt	$80,000,000
401(k)/457 assets managed	$10,000,000
Types of accounts managed	CEF
Tax-exempt clients	100
Minimum separate account	$200,000
No. of portfolio managers	2
Size of research staff	2

Financial Aims Corp. is an active equity, active fixed-income and balanced manager.

Its equity approach uses macro- and microanalysis. The macroanalysis relies on some quantitative measurements; the micro approach is value determinant, relying on price-earnings and price-sales confirmation in addition to Z-score. In fixed-income, it varies maturities based on economic and interest rate forecasts.

Robert Anton is chief investment officer; Eugene P. Lewis is client contact.

Financial Counselors Inc.

920 Main St., Suite 800, Kansas City,
Mo. 64105; (816) 471-8200

Total assets managed	$793,000,000
Total discretionary assets	$793,000,000
Discretionary tax-exempt	$699,000,000
Types of accounts managed	CEFGU
Minimum separate account	$300,000
No. of portfolio managers	4
Size of research staff	1

Financial Counselors Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach emphasizes growth and low p/e stocks, using Graham & Dodd analysis. Its fixed-income approach uses interest rate anticipation.

Bryant P. Barnes is chief investment officer; Steven Cox is client contact.

Financial Guaranty Corp.

7301 Ohms Lane, Suite 310, Edina,
Minn. 55435; (612) 893-1334

Total assets managed	$520,000,000
Total discretionary assets	$20,000,000
Discretionary tax-exempt	$20,000,000
Types of accounts managed	C
Tax-exempt clients	1
Minimum separate account	$10,000,000
No. of portfolio managers	2
Size of research staff	1

Financial Guaranty Corp. manages, consults and advises on guaranteed investment contracts.

The firm monitors 85 contract issuers, performs issuer credit analysis, monitors daily interest rates and performs spread analysis between GICs and other fixed-income instruments.

Robert K. Richey is chief investment officer and client contact.

Financial Management and Trust Services

300 S. Grand Ave., Suite 2500, Los
Angeles, Calif. 90071; (213)
229-1727

See entry for SECURITY PACIFIC INVESTMENT GROUP.

Fine Capital Management Group Inc.

7777 Glades Road, Boca Raton, Fla.
33434; (407) 479-2884

Total assets managed	$33,000,000
Total discretionary assets	$33,000,000
Discretionary tax-exempt	$20,000,000
Types of accounts managed	CEG
Minimum separate account	$500,000
No. of portfolio managers	2

Fine Capital Management Group Inc. is an active equity, active and passive fixed-income and balanced manager.

Its equity approach seeks medium- to large-cap stocks with accelerating earnings and that pass a screen of five valuation variables. Its fixed-income approach emphasizes high-quality debt securities using a laddered maturity but making interest rate judgments to determine the weightings. Options are used.

Norman D. Fine is chief investment officer and client contact.

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5335 SW Meadows Rd • Suite 200 • Lake Oswego, Oregon 97035

First Alabama Bank

P.O. Box 10247, Birmingham, Ala.
35202; (205) 325-7053

Total assets managed	$1,600,000,000
Total discretionary assets	$1,400,000,000
Discretionary tax-exempt	$418,000,000
Pooled accounts	$70,000,000
Separate accounts	$348,000,000
Tax-exempt clients	
Commingled	164
Separate	630
Types of accounts managed	CEFG
Minimum separate account	$100,000
No. of portfolio managers	10

First Alabama Bank is an active equity, active fixed-income and balanced manager.

The bank is a value-oriented manager with a bottom-up approach. Its investment approach is divided into two primary decision-making processes: stock screening for quality and price analysis screening.

Charles S. Northen III is chief investment officer; J. Stephen Ellis is client contact.

First Asset Management

First Bank Place East, Minneapolis,
Minn. 55380; (612) 370-4479

Total assets managed	$4,000,000,000
Discretionary tax-exempt	$3,400,000,000
Equity real estate assets	$80,000,000
Equity indexed assets	$50,000,000
Dedicated/immunized assets	$25,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	175
Minimum separate account	$2,000,000
No. of portfolio managers	11
Size of research staff	1

First Asset Management is an active and passive equity, active fixed-income, balanced, real estate and short-term manager.

Its equity approach uses sector rotation with a value bias. Selection of industries and securities is based on its economic forecast, a return-on-equity model and a fair value model. Options and stock index futures are used.

Its fixed-income strategy centers around fundamental interest rate forecasting within a framework for measuring and controlling both systematic and specific risk in the portfolio.

Its real estate approach selects properties whose values can be enhanced through aggressive management and additional capital.

John M. Murphy Jr. is chief investment officer; Kevin S. Underkofler is client contact.

First Austin Capital Management Inc.

1000 Westbank Drive, Suite 6B,
Austin, Texas 78746; (512)
328-9321

Total assets managed	$9,000,000
Total discretionary assets	$7,000,000
Discretionary tax-exempt assets	$1,000,000
Types of accounts managed	C
Tax-exempt clients	1
No. of portfolio managers	2

First Austin Capital Management Inc., a tactical asset allocation manager, uses a top-down approach to focus on relative value between asset classes. Bottom-up stock selection emphasizes high quality, low debt and cash generating companies selling at substantial discounts to intrinsic value.

In fixed income, the firm employs long-term interest rate anticipation based upon inflation outlook and economic activity.

Guy D. Coffelt is chief investment officer and client contact.

First Citizens National Bank Trust Department

P.O. Box 370; Dyersburg, Tenn.
38025; (901) 285-4410

Total assets managed	$125,000,000
Total discretionary assets	$81,000,000
Discretionary tax-exempt	$52,000,000
Pooled accounts	$52,000,000
Tax-exempt clients	70
Types of accounts managed	C
No. of portfolio managers	1
Size of research staff	1

First Citizens National Bank Trust Department is a passive equity, active fixed-income and balanced manager.

Its passive equity approach uses sector rotation and market timing/tactical asset allocation. Its fixed-income approach uses sector analysis and interest rate anticipation.

Ken Coleman is chief investment officer and client contact.

First Commerce Corp.-Trust Group

210 Baronne St., New Orleans, La.
70112; (504) 561-2183

Total assets managed	$820,000,000
Total discretionary assets	$820,000,000
Discretionary tax-exempt	$298,000,000
Pooled accounts	$83,000,000
Separate accounts	$215,000,000
401(k)/457 assets managed	$37,000,000
Tax-exempt clients	
Commingled	125
Separate	173
Types of accounts managed	CEFU
Minimum separate account	$1,000,000
No. of portfolio managers	8
Size of research staff	3

First Commerce Corp. — Trust Group is an active equity, active and passive fixed-income, balanced, tactical asset allocation and short-term cash manager.

Its equity approach is value oriented, using a quantitative selection process in the context of an overall balanced account strategic asset allocation process. Its fixed-income approach uses interest rate anticipation and sector analysis, emphasizing intermediate maturity and moderate volatility.

John C. Portwood is chief investment officer; Richard T. Hill is client contact.

First Fidelity Bancorporation

765 Broad St., Newark, N.J. 07102;
(201) 430-4584

Total assets managed	$12,800,000,000
Total discretionary assets	$9,200,000,000
Discretionary tax-exempt	$4,671,000,000
Pooled accounts	$792,000,000
Separate accounts	$3,879,000,000
401(k)/457 assets managed	$200,000,000
Tax-exempt clients	
Commingled	546
Separate	570
Types of accounts managed	CEFGU
Minimum separate account	$1,000,000
No. of portfolio managers	14
Size of research staff	5

First Fidelity Bancorporation is an active equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

For equities, the firm is value oriented, using growth stocks and sector rotation. The firm uses a "payback" approach that searches for relative value within a large universe of securities. For fixed-income, it manages duration around a band of an appropriate Shearson Lehman Hutton index with a specified level based on economic outlook.

The figures above also reflect the assets for First Fidelity Bank, New Jersey; Fidelity Bank, Philadelphia; and Merchants Bank, Allentown, Pa.

Edward T. Koch is chief investment officer; Susan Head is client contact.

First Financial Management and Trust

322 Demers Ave., Grand Forks, N.D.
58201; (701) 795-3265

Total assets managed	$350,000,000
Total discretionary assets	$290,000,000
Discretionary tax-exempt	$98,000,000
Pooled accounts	$6,000,000
Separate accounts	$92,000,000
401(k)/457 assets managed	$15,000,000
International equity assets	$2,000,000
Tax-exempt clients:	
Commingled	120
Separate	240
Types of accounts managed	CEF
No. of portfolio managers	1
Size of research staff	2

First Financial Management and Trust is an active and passive equity, active and passive fixed-income, balanced, tactical asset allocation, passive international/global equity and short-term manager.

Its equity approach is quantitative and value-oriented. Its fixed-income approach uses interest rate anticipation and sector analysis.

Michael Winkel is chief investment officer and client contact.

First Interstate Bank of Arizona

100 W. Washington, Phoenix, Ariz.
85003; (602) 528-6309

Total assets managed	$3,000,000,000
Total discretionary assets	$1,800,000,000
Discretionary tax-exempt	$400,000,000
Pooled accounts	$108,000,000
Separate accounts	$292,000,000
401(k)/457 assets managed	$25,000,000
Tax-exempt clients:	
Commingled	260
Separate	220
Types of accounts managed	CEFU
Minimum separate account	$300,000
No. of portfolio managers	13

First Interstate Bank of Arizona is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is to buy stocks, at reasonable prices, of companies with consistent records of above-average increases in earnings and dividends. Its fixed-income approach emphasizes construction of a high quality, conservative portfolio that produces a predictable income stream and low portfolio turnover.

R. Michael Sullivan is chief investment officer; Richard A. Malcomson is client contact.

First Interstate Bank of California

707 Wilshire Blvd., W10-6, Los
Angeles, Calif. 90017; (213)
614-2103

Total assets managed	$5,830,000,000
Total discretionary assets	$5,890,000,000
Discretionary tax-exempt	$4,450,000,000
Pooled accounts	$1,220,000,000
Separate accounts	$3,230,000,000
401(k)/457 assets managed	$560,000,000
International equity assets	$5,000,000
Equity indexed assets	$92,000,000
Fixed-income indexed assets	$119,000,000
Tax-exempt clients	
Commingled	319
Separate	286
Types of accounts managed	CEFGU
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	11

First Interstate Bank of California is a domestic and global active and passive equity, active and passive domestic fixed-income, balanced, tactical asset allocation and short-term manager.

Its equity approach is quantitative, focusing on MPT, indexation and sector allocation; in global equities, the firm uses active country selection. Its fixed-income approach is passive and uses sector analysis. Options and financial futures are used.

Alan R. Adelman is chief investment officer; Deborah Dilley is client contact.

First Interstate Bank of Denver

633 17th St., Denver, Colo. 80270;
(303) 293-5742

Total assets managed	$1,700,000,000
Discretionary tax-exempt	$0
Minimum separate account	$250,000
No. of portfolio managers	3
Size of research staff	18

First Interstate Bank of Denver is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach uses growth and low p/e stocks. Its fixed-income approach uses sector analysis.

Denver Investment Advisors Inc., a subsidiary of the bank, is profiled in this issue, and manages tax-exempt assets on behalf of the bank.

Kenneth Penland is chief investment officer; John Resetarits is client contact.

First Interstate Bank of Nevada-Trust Investment Department

3800 Howard Hughes Parkway, Las
Vegas, Nev. 89193; (702) 791-6480

Total assets managed	$1,014,000,000
Total discretionary assets	$1,014,000,000
Discretionary tax-exempt	$150,000,000
Pooled accounts	$5,000,000
Separate accounts	$145,000,000
401(k)/457 assets managed	$1,000,000
Mortgage assets	$9,000,000
Tax-exempt clients	152
Types of accounts managed	CEFU
Minimum separate account	$500,000
No. of portfolio managers	8
Size of research staff	1

First Interstate Bank of Nevada —Trust Investment Department is an active equity, active fixed-income, balanced and short-term cash manager.

Its value-oriented equity approach emphasizes sector rotation and tactical asset allocation. In fixed-income, it uses interest rate anticipation.

Albert H. Perdue and Gerne Davis are chief investment officer; Randy Campanale is client contact.

First Interstate Bank of Oregon, Capital Management Group

1300 S.W. Fifth Ave., Portland, Ore.
97201; (503) 225-2379

Total assets managed	$2,400,000,000
Total discretionary assets	$2,400,000,000
Discretionary tax-exempt	$1,316,000,000
Pooled accounts	$393,000,000
Separate accounts	$923,000,000
401(k)/457 assets managed	$138,000,000
Tax-exempt clients:	
Commingled	242
Separate	130
Types of accounts managed	CEFU
Minimum separate account	$1,000,000
No. of portfolio managers	12
Size of research staff	3

First Interstate Bank of Oregon, Capital Management Group is an active equity, passive fixed-income, balanced and short-term manager.

Its equity approach uses stocks with very low p/es. Its portfolios are structured for low risk, low portfolio beta of 0.8 to 0.9 and high yield.

Its fixed-income approach focuses on the intermediate sector. Average maturity is five to 12 years.

Dennis Wood is chief investment officer; Jan Dawson is client contact.

First Interstate Bank of Washington

P.O. Box 21927; Seattle, Wash.
98111; (206) 343-8346

Total assets managed	$3,200,000,000
Total discretionary assets	$3,200,000,000
Discretionary tax-exempt	$1,100,000,000
Pooled accounts	$208,000,000
Separate accounts	$892,000,000
401(k)/457 assets managed	$21,000,000
Tax-exempt clients:	
Commingled	204
Separate	58
Types of accounts managed	CEFGU
Minimum separate account	$1,000,000
No. of portfolio managers	9

First Interstate Bank of Washington is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach follows Graham & Dodd principles, and emphasizes low volatility, high dividend yield, high EPS stability, industrial sector shifting and large cap stocks, with moderate concentration in sectors or issues.

Its fixed-income approach emphasizes high credit quality and yield pick up swapping, with moderate emphasis on laddered maturity shifting and sector shifting.

J. Clark Reardon is chief investment officer; Lawrence T. Divers is client contact.

First Investment Management Corp.

120 N. Robinson, Suite 860 W,
Oklahoma City, Okla. 73102; (405)
272-4202

Total assets managed	$1,425,000,000
Total discretionary assets	$1,425,000,000
Discretionary tax-exempt	$1,425,000,000
401(k)/457 assets managed	$21,000,000
Types of accounts managed	CEFG
Tax-exempt clients	150
Minimum separate account	$3,000,000
No. of portfolio managers	4
Size of research staff	3

First Investment Management Corp. is an active equity, active fixed-income and balanced manager.

Its equity approach uses a multifactor decision framework incorporating value, earnings and price momentum components along with distinct buy, hold and sell decision rules for each equity sector.

Its fixed-income approach is structured, and involves a systematic management technique for controlling portfolio risk that can include active management and indexing on total return accounts.

C. Lee Liscom is chief investment officer; Lynn G. Horton is client contact.

First Kentucky Co.

P.O. Box 36010, Louisville, Ky. 40233;
(502) 581-7657

Total assets managed	$2,368,000,000
Total discretionary assets	$1,892,000,000
Discretionary tax-exempt	$1,744,000,000
International equity assets	$1,000,000
International fixed-income assets	$1,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	36
Minimum separate account	$10,000,000
No. of portfolio managers	5
Size of research staff	5

First Kentucky Co. is an active equity, active fixed-income and balanced manager.

Its equity approach stresses three attributes aimed at reducing volatility: low p/e, high yield and high growth. The firm maintains 20% to 40% exposure in each.

Its primary fixed-income approach is sector analysis. The firm always maintains duration plus 1½ years around the benchmark, and continually repositions sectors and issues while maintaining high-quality portfolios.

William F. Chandler is chief investment officer; Cari W. Hafele is client contact.

First Kentucky Trust Co.

First National Tower, P.O. Box 36010,
Louisville, Ky. 40232; (502)
581-4050

Total assets managed	$13,400,000,000
Total discretionary assets	$7,100,000,000
Discretionary tax-exempt	$3,500,000,000
401(k)/457 assets managed	$2,000,000
Types of accounts managed	CEFU
Tax-exempt clients	222
Minimum separate account	$300,000
No. of portfolio managers	4
Size of research staff	3

First Kentucky Trust Co. is an active domestic and international equity, active fixed-income, balanced, real estate, short-term and GIC manager.

Its equity approach is characterized by dynamic modeling. Using S&P weightings as a framework, the firm varies the direction of its emphasis by limited degrees. Stock selection, using fundamental and technical methods, provides added value.

Its fixed-income approach is value-oriented and structured; the firm uses Shearson Lehman Hutton indexes as duration guide and varies from it by no more than 18 months.

The firm's real estate division offers individual or limited partnerships.

Stanley A. Rourke is chief investment officer; Dennis Weihe is client contact.

First Manhattan Capital Management

437 Madison Ave., New York, N.Y.
10022; (212) 832-4736

Total assets managed	$2,425,000,000
Total discretionary assets	$2,425,000,000
Discretionary tax-exempt	$2,425,000,000
Types of accounts managed	CEF
Tax-exempt clients	34
Minimum separate account	$20,000,000
No. of portfolio managers	8
Size of research staff	13

First Manhattan Capital Management, an active equity manager, emphasizes Graham & Dodd analysis and low p/e stocks in a bottom-up, risk-averse strategy. It buys companies with high returns on equities and low financial leverage at prices substantially below business values and holds positions for long-term results.

David S. Gottesman and Robert M. Howitt are chief investment officers; Gregory B. Densmore is client contact.

First Maryland Asset Management

25 S. Charles St., Baltimore, Md.
21201; (301) 244-4323

Total assets managed	$775,000,000
Discretionary tax-exempt	$569,000,000
401(k)/457 assets managed	$33,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	153
Minimum separate account	$500,000
No. of portfolio managers	4
Size of research staff	4

First Maryland Asset Management is an active equity, active fixed-income, balanced, tactical asset allocation manager and short-term manager.

Its top-down equity approach emphasizes capital growth through total return, achieved by a combination of stock appreciation, dividend and interest income and asset allocation.

Its top-down fixed-income approach uses interest rate anticipation and structures the duration and average maturity of the portfolio accordingly.

Brian R. Mund is chief investment officer; Dawson Richardson is client contact.

First Midwest Asset Management Co.

121 N. Chicago St., Joliet, Ill. 60431;
(815) 740-7670

Total assets managed	$900,000,000
Total discretionary assets	$760,000,000
Discretionary tax-exempt	$240,000,000
401(k)/457 assets managed	$70,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	440
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	1

First Midwest Asset Management Co. is an active equity, active fixed-income, balanced and short-term manager.

Its primary equity approach emphasizes low p/e stocks. Its fixed-income approach uses laddered maturities.

Paul E. Gantzert is chief investment officer; Gerald W. Saunders, Terry G. Beaudry and Mark R. Anderson are client contacts.

First National Bank of Amarillo

P.O. Box 1331, Amarillo, Texas
79180; (806) 378-1968

Total assets managed	$548,000,000
Total discretionary assets	$430,000,000
Discretionary tax-exempt	$216,000,000
Pooled accounts	$31,000,000
Separate accounts	$185,000,000
Tax-exempt clients:	
Commingled	20
Separate	85
Types of accounts managed	CEF
Minimum separate account	$250,000
No. of portfolio managers	2

First National Bank of Amarillo is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach is value-oriented, using low p/e, high-yielding situations. Turnover is minimized to reduce transaction costs. Its active fixed-income approach uses swaps to alter average life, quality or sector exposure. Longer sectors are avoided.

George Cason is chief investment officer and client contact.

First National Bank of Omaha

1 First National Center, Omaha, Neb.
68103; (402) 341-0500

Total assets managed	$1,300,000,000
Total discretionary assets	$900,000,000
Discretionary tax-exempt	$750,000,000
Separate accounts	$750,000,000
401(k)/457 assets managed	$14,000,000
Tax-exempt clients	44
Types of accounts managed	CEFGU
Minimum separate account	$3,000,000
No. of portfolio managers	7
Size of research staff	2

First National Bank of Omaha is an active equity, active fixed-income and balanced manager.

In equities, it uses Graham & Dodd analysis in a bottom-up, value-oriented, long-term approach dealing with larger, seasoned companies with sound fundamentals and selling at reasonable prices.

Its bond portfolios use a laddered approach, with about a 10% emphasis placed on the short or long portion based on the economic outlook. Minimum rating is A; maximum maturity is 25 years.

Thomas Allen is chief investment officer; Milton Lackey is client contact.

First NH Investment Services

1000 Elm St., Manchester, N.H.
03101; (603) 644-6422

Total assets managed	$1,100,000,000
Total discretionary assets	$672,000,000
Discretionary tax-exempt	$164,000,000
Types of accounts managed	CEFGU
Minimum separate account	$500,000
No. of portfolio managers	4

First NH Investment Services is an active equity, active fixed-income, balanced and active international equity manager.

Its equity approach is value-oriented. In fixed-income, it uses interest rate anticipation. Options are used.

Jack Griffiths is chief investment officer; Dan Sanders and Margaret Wiebusch are client contact.

First Pacific Advisors Inc.

10301 W. Pico Blvd., Los Angeles,
Calif. 90064; (213) 277-4900

Total assets managed	$2,496,000,000
Total discretionary assets	$2,496,000,000
Discretionary tax-exempt	$1,738,000,000
Types of accounts managed	CEF
Tax-exempt clients	30
Minimum separate account	$20,000,000

No. of portfolio managers	4
Size of research staff	2

First Pacific Advisors Inc. is an active equity, active fixed-income and balanced manager.

It is a fundamental, disciplined, value-oriented equity investor, applying specific criteria to identify superior companies and determine attractive prices. Options are used occasionally.

Its primary fixed-income approach also is value-oriented.

George H. Michaelis is chief investment officer. Lawrence P. McNeil and Dayl Ann Weber are client contacts.

First Quadrant Corp.

305 Madison Ave., Morristown, N.J.
07960; (201) 285-7119

Total assets managed	$9,405,000,000
Total discretionary assets	$9,405,000,000
Discretionary tax-exempt	$1,674,000,000
Types of accounts managed	CEF
Tax-exempt clients	10
Minimum separate account	$25,000,000
No. of portfolio managers	8
Size of research staff	9

First Quadrant Corp. is an active equity and fixed-income, balanced, tactical asset allocation, active global equity and fixed-income, and short-term manager.

Its equity approach employs quantitative screening methods to create diversified portfolios whose p/e is lower and yield generally higher than the S&P 500. Its fixed-income approach uses sector analysis. Portfolios have durations longer than the Shearson Lehman Hutton Government/Corporate Bond Index. Options and financial futures are used.

Robert D. Arnott is chief investment officer and client contact.

First Security Investment Management Inc.

61 S. Main St., Salt Lake City, Utah
84130; (801) 350-5835

Total assets managed	$2,500,000,000
Discretionary tax-exempt	$1,000,000,000
401(k)/457 assets managed	$100,000,000
International equity assets	$25,000,000
Types of accounts managed	CEF
Tax-exempt clients	400
Minimum separate account	$1,000,000
No. of portfolio managers	8
Size of research staff	3

First Security Investment Management Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach emphasizes low p/e and growth stocks at reasonable prices. Its fixed-income approach uses interest rate anticipation and stresses capital preservation.

H. James Darcey is chief investment officer and client contact.

1st Source Bank, Trust & Investment Management Group

100 N. Michigan, P.O. Box 1602,
South Bend, Ind. 46634; (219)
236-2790

Total assets managed	$876,000,000
Total discretionary assets	$558,000,000
Discretionary tax-exempt	$196,000,000
Pooled accounts	$70,000,000
Separate accounts	$126,000,000
Tax-exempt clients:	
Commingled	330
Separate	80
Types of accounts managed	CEFU
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	2

1st Source Bank, Trust & Investment Management Group, is an active equity, active and passive fixed-income, balanced and short-term manager.

Its uses multiple equity management styles, all driven by a value philosophy. Options are used. In fixed income, it has a passive, intermediate-term philosophy, with value added by a modest level of market timing.

John S. Seidl is chief investment officer; James P. Coleman is client contact.

First Tennessee Investment Management Inc.

165 Madison Ave., Memphis, Tenn.
38101; (901) 523-5651

Total assets managed	$2,335,000,000
Total discretionary assets	$2,335,000,000
Discretionary tax-exempt	$1,222,000,000
401(k)/457 assets managed	$46,000,000
Equity real estate assets	$53,000,000
Mortgage assets	$7,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	742
Minimum separate account	$500,000
No. of portfolio managers	6
Size of research staff	4

First Tennessee Investment Management Inc. is an active equity, active fixed-income, balanced, short-term and special situations manager.

Equity selection is based on fundamental analysis with a strong value comparison orientation; sector weightings are emphasized. Quantitative and technical screens are used.

Its fixed-income approach uses interest rate anticipation to adjust portfolio duration. Yield curve and credit and sector analyses are emphasized to take advantage of distortions between various maturities, issues and sectors.

William V. Pruett is chief investment officer; Patrick Kunnecke is client contact.

First Union National Bank

301 S. Tryon St., Charlotte, N.C.
28288; (704) 383-5413

Total assets managed	$14,000,000,000
Total discretionary assets	$8,200,000,000
Discretionary tax-exempt	$4,400,000,000
Pooled accounts	$1,185,000,000
Separate accounts	$3,215,000,000
401(k)/457 assets managed	$761,000,000
International cash assets	$120,000,000
Equity indexed assets	$40,000,000
Tax-exempt clients:	
Commingled	1,246
Separate	280
Types of accounts managed	CEFGU
Minimum separate account	$1,000,000
No. of portfolio managers	39
Size of research staff	6

First Union National Bank is an active and passive equity, active fixed-income and balanced manager.

Its equity approach uses Graham & Dodd principles to identify low p/e stocks. It invests in companies that have average to above-average financial characteristics and sell substantially below market valuation levels.

Its fixed-income approach is conservative and based on interest rate anticipation. It seeks to provide consistently positive returns, attractive levels of current income and capital gains when interest rates decline.

William R. Hackney III is chief investment officer; Jack "Jeb" S. Courtney is client contact.

First Wachovia

301 N. Main St., Winston-Salem, N.C.
27150; (919) 770-5764

Total assets managed	$10,600,000,000
Discretionary tax-exempt	$6,432,000,000
Pooled accounts	$1,283,000,000
Separate accounts	$5,149,000,000
Real estate equity assets	$380,000,000
Equity indexed assets	$50,000,000
Types of accounts managed	CEFGU
Minimum separate account	$1,000,000
No. of portfolio managers	19
Size of research staff	9

First Wachovia is an active and passive equity, active fixed-income, balanced, real estate, short-term and timberland manager.

Its equity approach uncovers value by combining early identification of trends influencing stock prices and quantitative research and analysis. Its fixed-income approach is multidisciplined, weaving judgments about the interest rate environment with opportunities to add value through sector rotation, security swapping and credit analysis.

H. Vernon Winters is chief investment officer; Thomas H. McAllister is client contact.

First Wilshire Securities Management Inc.

727 W. Seventh St., Suite 333, Los
Angeles, Calif. 90017; (213)
623-8705

Total assets managed	$49,000,000
Total discretionary assets	$40,000,000
Discretionary tax-exempt	$0
Minimum separate account	$100,000,000
No. of portfolio managers	3
Size of research staff	1

First Wilshire Securities Management Inc. is an active equity and active fixed-income manager.

Its equity approach emphasizes small-capitalization stocks; its fixed-income approach focuses on sector analysis.

Fred L. Astman is chief investment officer; Bruce Atwater Staller is client contact.

First Wisconsin Asset Management

777 E. Wisconsin Ave., Suite 3230;
Milwaukee, Wis. 53202; (414)
765-6966

Total assets managed	$2,373,000,000
Total discretionary assets	$2,373,000,000
Discretionary tax-exempt	$1,200,000,000
401(k)/457 assets managed	$165,000,000
Types of accounts managed	CEFU
Tax-exempt clients	1,400
Minimum separate account	$5,000,000
No. of portfolio managers	12

First Wisconsin Asset Management is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach is small- to medium-capitalization growth management focusing on companies with superior financial characteristics whose current market price does not adequately reflect the expected growth in earnings over a two- to three-year horizon.

The firm's risk-averse fixed-income management emphasizes stability of principal and generation of current income. The primary strategies focus on maturity mix and sector diversification.

J. Scott Harkness is chief investment officer; Michael Bills is client contact.

First Wisconsin Trust Co.

777 E. Wisconsin Ave., Milwaukee,
Wis. 53202; (414) 765-4444

Total assets managed	$4,744,000,000

Real Estate.
Real Results.

In the acquisition, management and disposition of industrial property, there is no substitute for experience.

Having acquired over 390 industrial buildings since its founding in 1975, The RREEF Funds has built an exceptional record of success. From 38 offices nationwide, RREEF partners and staff provide portfolio and property management for each building — a hands-on approach that consistently adds value.

Currently, RREEF's industrial portfolio has a market value of $910 million, representing over 30% of its total commingled fund holdings — over 19 million square feet.

RREEF's experience and skill in managing industrial properties is proven in their returns. Since 1977 the company has consistently and impressively outperformed the Frank Russell Company (FRC) Warehouse Index.

To find out more about RREEF's proven experience in achieving long-term financial results, please call one of our partners.

Paul Sack
San Francisco
(415) 781-3300

Donald A. King, Jr.
Chicago
(312) 266-9300

Peter Steil
New York
(212) 688-3900

RREEF
The RREEF Funds

Real Estate. Real Results.

Total discretionary assets	$4,744,000,000
Discretionary tax-exempt	$2,798,000,000
Pooled accounts	$1,236,000,000
Separate accounts	$1,562,000,000
Real estate equity assets	$8,000,000
International equity assets	$4,000,000
International fixed-income assets	$3,000,000
Equity indexed assets	$101,000,000
Fixed-income indexed assets	$150,000,000
Dedicated/immunized assets	$850,000,000
Types of accounts managed	CEFGU
No. of portfolio managers	22

First Wisconsin Trust Co. is an active and passive equity, active and passive fixed-income, balanced, passive international equity and fixed-income, real estate and short-term manager.

Its equity approach is conservative and income-oriented, emphasizing large-cap and some medium-cap issues. Current dividend yield and the prospect for dividend growth are important elements. Options are used.

Its quantitative fixed-income approach adapts the basic principles of immunization and enhances portfolio returns to appropriate benchmarks.

Its real estate approach uses unleveraged equity positions in existing leased commercial properties to develop a stable income stream and potential appreciation.

Jackson Kirk is chief investment officer; Robert J. Aubrecht is client contact.

FirsTier Bank

13th and M streets, Lincoln, Neb.
68501; (402) 434-1307

Total assets managed	$2,330,000,000
Total discretionary assets	$840,000,000
Discretionary tax-exempt	$180,000,000
Pooled accounts	$36,000,000
Separate accounts	$144,000,000
Real estate equity assets	$6,000,000
International equity assets	$7,000,000
Tax-exempt clients	
Commingled	131
Separate	76
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	5

FirsTier Bank is an active and fixed-income, balanced, real estate and passive international equity manager.

Its equity approach emphasizes growth stocks; valuation and asset allocation also are important. Its fixed-income approach uses interest rate anticipation, emphasizing high quality and liquidity.

Real estate assets are in closed-end funds managed by outside advisers.

William S. Eastwood is chief investment officer; John Guenzel is client contact.

Fischer, Francis, Trees & Watts Inc.

717 Fifth Ave., New York, N.Y. 10022;
(212) 350-8000

Total assets managed	$13,000,000,000
Total discretionary assets	$13,000,000,000
Discretionary tax-exempt	$10,000,000,000
International fixed-income assets	$100,000,000
Dedicated/immunized assets	$200,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	36
Minimum separate account	$50,000,000
No. of portfolio managers	14

Fischer, Francis, Trees & Watts Inc. is a domestic and international-global active fixed-income manager.

It uses interest rate anticipation and sector analysis. It manages market risk and sector spread opportunities in prime quality issues with active trading. Hedged and unhedged foreign securities are used, as are options and futures.

Cecilia Murphy Baron and S. Bruce Kauffman are client contacts.

Fisher Investments Inc.

301 Henrik Road, Woodside, Calif.
94062; (415) 851-3334

Total assets managed	$432,000,000
Total discretionary assets	$432,000,000
Discretionary tax-exempt	$324,000,000
401(k)/457 assets managed	$15,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	71
Minimum separate account	$5,000,000
Size of research staff	7

Fisher Investments Inc., an active equity and balanced manager, focuses on medium-cap equities with low price-sales ratios, strong balance sheets and competitive business advantages as determined through quantitative qualitative research.

In balanced accounts, its fixed-income approach emphasizes U.S. Treasury securities in staggered maturities with A1/P1 commercial paper used to maximize cash yields.

Kenneth L. Fisher is chief investment officer; Joseph L. Toms is client contact.

Fiske Capital Management

40 Grove St., Box 96, Wellesley,
Mass. 02187; (617) 237-0010

Total assets managed	$52,000,000
Total discretionary assets	$52,000,000
Discretionary tax-exempt	$40,000,000
Types of accounts managed	CEF
Tax-exempt clients	60
Minimum separate account	$250,000
No. of portfolio managers	1
Size of research staff	4

Fiske Capital Management Inc. is an active equity and tactical asset allocation manager.

The firm uses a fully managed tactical asset allocation program to achieve high total return with a low level of risk.

Edwin F. Thrall is chief investment officer; David H. Badeau is client contact.

Fleet/Norstar Investment Advisors Inc./New York Institutional Group

45 East Ave., Fourth Floor, Rochester,
N.Y. 14604; (716) 423-1900

Total assets managed	$3,000,000,000
Total discretionary assets	$3,000,000,000
Discretionary tax-exempt	$2,100,000,000
Types of accounts managed	CEFGU
Minimum separate account	$1,000,000

Fleet/Norstar Investment Advisors Inc. New York Institutional Group is an active equity, active fixed-income, balanced, active international/global equity and short-term manager.

The firm identifies underpriced stocks through quantitative screens that measure the relationship of a stock's price to its normalized earnings, dividend yield, cash flow per share and book value.

In fixed-income, the firm's goal is to achieve above-average returns while reducing portfolio volatility. Analysis of the business cycle and interest rates are key components of maturity and sector selection.

Marshall Raucci is client contact.

Fleet/Norstar Investment Advisors Inc.

100 Westminster St., Providence, R.I.
02903; (401) 278-3318

Total assets managed	$8,000,000,000
Total discretionary assets	$8,000,000,000
Discretionary tax-exempt	$4,200,000,000
Types of accounts managed	CEFGU
Minimum separate account	$1,000,000

Fleet/Norstar Investment Advisors Inc. is an active equity, active fixed-income, balanced, active international/global equity and short-term manager.

Its equity approach identifies underpriced stocks through quantitative screens that measure the relationship of a stock's price to its normalized earnings, dividend yield, cash flow per share and book value.

In fixed-income, the firm seeks to achieve above-average returns while reducing portfolio volatility. Analysis of the business cycle and interest rates are key components.

Harold MacKinney Jr. is chief investment officer; Marshall Raucci Jr. is client contact.

Fleming Canada Partners

620-1100 Melville St., Vancouver,
British Columbia V6E 4A6; (604)
687-7306

Total tax-exempt	$420,000,000
Assigned to other firms	$420,000,000
For subsidiaries of U.S. firms	$5,000,000

Fleming Canada Partners, formerly European & Pacific Investment Management, a Canadian firm, is a manager of managers.

The firm provides active management of U.S. and international equities through separate accounts and pooled funds. International index funds also are offered.

Its international equity approach emphasizes in-house research originated by Fleming's global network of analysts. Bottom-up fundamental analysis in security selection is overlaid by a top-down approach to asset allocation.

Robert Fleming, London; Jardine Fleming, Hong Kong; and State Street Research & Management, Boston; manage $420 million in tax-exempt on the firm's behalf.

In Vancouver, clients contacts are Frans H. Brouwer and Leonard A. McFarland; in Toronto, Michael J.V. Warrender, (416) 360-7270.

Flippin, Bruce & Porter Inc.

800 Main St., P.O. Box 6138,
Lynchburg, Va. 24505; (804)
845-4900

Total assets managed	$304,000,000
Total discretionary assets	$304,000,000
Discretionary tax-exempt	$233,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	30
Minimum separate account	$2,000,000
No. of portfolio managers	2
Size of research staff	1

Flippin, Bruce & Porter Inc. is an active equity and balanced manager.

Its equity approach is contrarian. Managers look beyond current investor emotion, discounting Wall Street expectations and relating historical financial characteristics to current price. Options are used.

A contrarian fixed-income manager, the firm uses intermediate bonds to create a "barbell of quality" structure, producing a shorter average maturity with a higher than-average yield.

John M. Flippin and John T. Bruce are chief investment officers; R.G. Porter is client contact.

Richard Fontaine Associates

111 S. Calvert St., Suite 1550,
Baltimore, Md. 21202; (301)
385-1550

Total assets managed	$226,000,000
Total discretionary assets	$226,000,000
Discretionary tax-exempt	$132,000,000
401(k)/457 assets managed	$15,000,000
Types of accounts managed	CEFG
Tax-exempt clients	35
Minimum separate account	$3,000,000
No. of portfolio managers	1
Size of research staff	1

Richard Fontaine Associates Inc. is an active equity, active fixed-income, balanced and tactical asset allocation manager.

Its equity approach is aggressive, using a valuation-driven strategy to rotate within stock sectors and into cash or bonds for defensive purposes. Its fixed-income approach is based on interest rate anticipation and uses only short- to intermediate-term Treasuries.

Richard H. Fontaine is chief investment officer and client contact.

Forest Investment Associates

1 Premier Plaza, Suite 710, 5605
Glenridge Drive, Atlanta, Ga. 30342;
(404) 847-0794

Total assets managed	$63,000,000
Total discretionary assets	$38,000,000
Discretionary tax-exempt	$38,000,000
Equity real estate assets	$38,000,000
Types of accounts managed	C
Tax-exempt clients	1
Minimum separate account	$10,000,000
No. of portfolio managers	3
Size of research staff	2

Forest Investment Associates, a timberland manager, acquires and manages equity interests in timber and timberland in the United States with the objective of capital preservation and real appreciation. Properties are diversified by location and age of timber.

Charles M. Tarver is chief investment officer; L. Richard Doelling is client contact.

Forstmann-Leff Associates

55 E. 52nd St., New York, N.Y. 10055;
(212) 644-9888

Total assets managed	$4,091,000,000
Total discretionary assets	$4,091,000,000
Discretionary tax-exempt	$3,929,000,000
Types of accounts managed	CEFU
Tax-exempt clients	52
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	5

Forstmann-Leff Associates Inc. is an active equity, balanced and tactical asset allocation manager.

Its risk-averse, capital preservation- and asset allocation-driven equity approach uses sector rotation and market timing. Management of fixed-income and cash equivalents, both used as equity substitutes, is keyed to interest rate forecasting and positioning on the yield curve. Stock index futures are used.

Joel B. Leff and William F. Harnisch are chief investment officers; Peter Lusk and Sara Rife are client contacts.

Fort Hill Investors Management Corp.

260 Franklin St., Boston, Mass. 02110;
(617) 439-4488

Total assets managed	$394,000,000
Total discretionary assets	$380,000,000
Discretionary tax-exempt	$348,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	36
Minimum separate account	$1,000,000
No. of portfolio managers	5

Fort Hill Investors Management Corp. is an active equity, active fixed-income and balanced manager.

Its primary equity approach is risk-averse, using cash-flow analysis and recognition of asset value. Its primary fixed-income approach uses interest rate anticipation and sector analysis.

Robert R. Lakian is chief investment officer; Robert P. Caccia is client contact.

The assets of one subsidiary are included above:

- Fort Hill Union Management Co. provides specialized investment management services to Taft-Hartley clients. It has 17 clients and manages $290 million in assets.

Its investment approaches are identical to those of Fort Hill Investors, with the addition of a socially sensitive investment program with strict adherence to the AFL-CIO boycott list.

Fort Hill Union Management

260 Franklin St., Boston, Mass. 02110;
(617) 439-4488, (800) 553-0047

See entry for FORT HILL INVESTORS MANAGEMENT CORP.

Fox Asset Management

44 Sycamore Ave., Suite 3E, Little
Silver, N.J. 07739; (201) 747-6345

Total assets managed	$207,000,000
Total discretionary assets	$207,000,000
Discretionary tax-exempt	$130,000,000
401(k)/457 assets managed	$4,000,000
International equity assets	$9,000,000
International fixed-income assets	$1,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	74
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	1

Fox Asset Management is an active equity, active fixed-income and balanced manager.

Its equity approach is value-oriented, focusing on a company's cash flow. Its fixed-income approach is non-anticipatory. Short- and intermediate-term (two- to seven-year) bonds mostly are used, preserving capital and minimizing the impact of interest rate volatility.

J. Peter Skirkanich is chief investment officer; Russell S. Tompkins is client contact.

Foxhall Investment Management

815 Connecticut Ave., Suite 200,
Washington, D.C. 20006; (202)
872-6606

Total assets managed	$338,000,000
Total discretionary assets	$338,000,000
Discretionary tax-exempt	$153,000,000
401(k)/457 assets managed	$10,000,000
Types of accounts managed	CEFU
Tax-exempt clients	100
Minimum separate account	$200,000
No. of portfolio managers	8
Size of research staff	4

Foxhall Investment Management is an active equity, active fixed-income, and balanced manager.

Foxhall employs a top-down asset allocation process using the firm's analysis of forecasts; it uses a bottom-up approach to stock selection based on fundamentals and industry trends.

John E. Montgomery is chief investment officer; Douglas C. Eby is client contact.

Foyston, Gordon & Payne

10 King St. E., Suite 1201, Toronto,
Ontario M5C 1C3; (416) 362-4725

Total assets managed	$405,000,000
Total discretionary assets	$405,000,000
Discretionary tax-exempt	$312,000,000
For subsidiaries of U.S. firms	$100,000,000
Tax-exempt clients	22
U.S. subsidiaries	5
Types of accounts managed	CEFU
Minimum separate account	$3,000,000
No. of portfolio managers	4

Foyston, Gordon & Payne Inc., a Canadian firm, is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach combines growth and low p/e stocks with Graham & Dodd analysis. Stock selection is primarily bottom-up, using an in-house screening process for fundamentals.

Its fixed-income approach uses interest rate anticipation and sector analysis, concentrating on government securities augmented with high-quality corporate issues.

Peter Gordon is chief investment officer and client contact.

Franklin Asset Management Systems

999 Baker Way, Suite 410, San
Mateo, Calif. 94404; (415) 570-3078

Total assets managed	$1,100,000,000
Total discretionary assets	$1,100,000,000
Discretionary tax-exempt	$650,000,000
Types of accounts managed	CEFG
Tax-exempt clients	23
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	2

Franklin Asset Management Systems is an active equity manager offering South Africa-free portfolios. The firm uses growth and low p/e stocks.

Marvin McClay is chief investment officer; J. Paul Lewis is client contact.

Franklin Portfolio Associates

1 Post Office Square, Boston, Mass.
02109; (617) 423-4448

Total assets managed	$3,400,000,000
Total discretionary assets	$3,182,000,000
Discretionary tax-exempt	$3,182,000,000
Types of accounts managed	CEFU
Tax-exempt clients	29
Minimum separate account	$10,000,000
No. of portfolio managers	4

Franklin Portfolio Associates, an active quantitative equity manager, uses a multiple valuation approach to determine the relative attractiveness of a large universe of stocks. Portfolios are constructed to reflect client benchmarks.

John J. Nagorniak is chief investment officer; Spencer L. Timm is client contact.

Franklin Research & Development Corp.

711 Atlantic Ave., Boston, Mass.
02111; (617) 423-6655

Total assets managed	$205,000,000
Total discretionary assets	$205,000,000
Discretionary tax-exempt	$102,000,000
Types of accounts managed	CFU
Tax-exempt clients	42
Minimum separate account	$400,000
No. of portfolio managers	8
Size of research staff	3

Franklin Research & Development Corp. is an active equity, active fixed-income and balanced manager.

The firm applies social screens (such as weaponry, South Africa and employee relations) to its earnings driven, sector rotational, fundamental growth approach. Its fixed-income approach uses interest rate anticipation and social screens.

Edmund T. Bennett is chief investment officer; Diane E. Mills is client contact.

Global custody/master trust banks will be profiled Oct. 1.

25 largest equity indexers

Firm	$ mils.*
Wells Fargo	58,787
Bankers Trust	33,882
Mellon Capital	23,365
State Street Bank	21,878
ANB Investment	7,864
Alliance Capital	7,048
G.E. Investment	5,879
Manufacturers Nat'l/Detroit	4,014
Dimensional Fund	3,819
PanAgora Asset	3,044
Chase Investors	2,955
Wilshire Asset	2,893
Vanguard Group	1,983
Sears Investment	1,947
J.P. Morgan	1,683
Chancellor Capital	1,400
BEA Associates	1,233
Northern Investment	1,093
Travelers	1,040
INTECH	1,027
Axe-Houghton	789
Pacific Investment	736
NCNB Nat'l Bank	700
ASB Capital	600
Capstone Asset	536
Total	**190,195**

*Discretionary, tax-exempt assets

Fraser Management Associates Inc.

309 S. Willard, P.O. Box 494,
Burlington, Vt. 05402; (802)
658-0322

Total assets managed	$102,000,000
Total discretionary assets	$102,000,000
Discretionary tax-exempt	$29,000,000
Types of accounts managed	CEF
Tax-exempt clients	37
Minimum separate account	$100,000
No. of portfolio managers	4

Fraser Management Associates Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach is contrarian; its fixed-income approach is passive.

James L. Fraser is chief investment officer; David D. Steece is client contact.

Froley, Revy Investment Co.

10900 Wilshire Blvd., Suite 1050, Los
Angeles, Calif. 90024; (213)
208-4938

Total assets managed	$826,000,000
Total discretionary assets	$826,000,000
Discretionary tax-exempt	$542,000,000
401(k)/457 assets managed	$6,000,000
International assets	$21,000,000
Types of accounts managed	CGU
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	2

Froley, Revy Investment Co. Inc. invests in growth and small-cap companies through convertible securities.

George A. Froley and Thomas Revy are chief investment officers; Melinda J. Gordon is client contact.

Frontier Capital Management

99 Summer St., 19th Floor, Boston,
Mass. 02108; (617) 261-0777

Total assets managed	$897,000,000
Total discretionary assets	$897,000,000
Discretionary tax-exempt	$863,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	39
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	5

Frontier Capital Management Co., an active equity and balanced manager, focuses on companies with rapidly growing earnings. That approach is used in traditional growth and small-cap portfolios.

J. David Wimberly is chief investment officer; Nancy J. Smith is client contact.

Frost National Bank

P.O. Box 1600, San Antonio, Texas
78296; (512) 220-4361

Total assets managed	$6,008,000,000
Total discretionary assets	$1,149,000,000
Discretionary tax-exempt	$324,000,000
Pooled accounts	$40,000,000
Separate accounts	$284,000,000
401(k)/457 assets managed	$11,000,000
Tax-exempt clients	
Commingled	150
Separate	12
Types of accounts managed	CEFG
Minimum separate account	$500,000
No. of portfolio managers	8
Size of research staff	1

Frost National Bank is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach uses Graham & Dodd principles and proprietary valuation techniques to identify stocks undervalued in relation to the market. Its fixed-income approach employs interest rate anticipation and sector analysis. Options are used.

Vernon Torgerson is chief investment officer. Andrew S. Behrends is client contact.

Furgueson Capital Management Inc.

19 W. 44th St., New York, N.Y. 10036;
(212) 840-1781

Total assets managed	$118,000,000
Total discretionary assets	$59,000,000
Discretionary tax-exempt	$20,000,000
Types of accounts managed	CEF
Tax-exempt clients	29
Minimum separate account	$100,000
No. of portfolio managers	4

Furgueson Capital Management Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach emphasizes growth and emerging growth stocks analyzed through Graham & Dodd principles. Its fixed-income approach is passive. Bonds are used for income and balance. Maturities usually are laddered to reduce interest rate risk.

Cornelius Furgueson IV is chief investment officer. Mr. Furgueson and Stephen Orr are client contacts.

Furman Selz Capital Management Inc

230 Park Ave., New York, N.Y. 10169;
(212) 309-8422

Total assets managed	$905,000,000
Total discretionary assets	$905,000,000
Discretionary tax-exempt	$531,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	38
Minimum separate account	$3,000,003
No. of portfolio managers	6
Size of research staff	15

Furman Selz Capital Management Inc. is an active equity, active and passive fixed-income and balanced manager.

Its equity approach focuses on demonstrated and expected growth. The firm is price sensitive in stock selection; portfolios have p/e ratios below that of the S&P 500, based on projected earnings. Options are used.

Its, fixed-income approach focuses on the key variable of fixed-income returns: interest rates and controlling risk by limiting investments to higher quality and shorter maturity issues.

Robert H. Buckles is chief investment officer; William W. Storff is client contact.

FX Concepts Inc.

100 Maiden Lane, New York, N.Y.
10038; (212) 363-7450

Total assets managed	$460,000,000
Discretionary tax-exempt	$250,000,000
International cash assets	$460,000,000
Types of accounts managed	C
Tax-exempt clients	2
Minimum separate account	$14,000,000
No. of portfolio managers	3
Size of research staff	4

FX Concepts Inc., a foreign exchange manager, bases its approach on signals from a quantitative and technical proprietary model.

The firm managers overlay strategies on $250 million in tax-exempt assets; it does not manage the underlying assets.

John R. Taylor Jr. is chief investment officer; John Serhant is client contact.

G

Gabelli-O'Connor Fixed Income Management Co.

8 Sound Shore Drive, Greenwich,
Conn. 06830; (203) 629-2156

Total assets managed	$530,000,000
Total discretionary assets	$530,000,000
Discretionary tax-exempt	$145,000,000
Types of accounts managed	C
Tax-exempt clients	2
Minimum separate account	$10,000,000
No. of portfolio managers	2

Gabelli-O'Connor Fixed Income Management Co., a short- and short intermediate-term manager, uses an aggressive management style for its laddered portfolios. Portfolios are actively traded using T-bill swaps rolls, U.S. governments, agencies and money market instruments based on yield spread analysis.

Thomas E. O'Connor is chief investment officer. Norma J. Niehoff is client contact.

Gaiacorp U.S. Ltd.

275 Madison Ave., Suite 1414, New
York, N.Y. 10016; (212) 867-7432

Total assets managed	$280,000,000
Total discretionary assets	$280,000,000
Discretionary tax-exempt	$0
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	3

Gaiacorp U.S. Ltd., a currency forwards manager, uses active hedging programs to add value from currency exposure while reducing portfolio risk. EAFE index overlay products and currency as an asset class also are available. Options are used.

J.T. Ross Jackson is chief investment officer. C. Hayes Miller is client contact.

GAMCO Investors Inc.

655 Third Ave., New York, N.Y. 10017;
(212) 972-2350

Total assets managed	$4,621,000,000
Total discretionary assets	$4,621,000,000
Discretionary tax-exempt	$3,282,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	261
Minimum separate account	$5,000,000
No. of portfolio managers	19
Size of research staff	7

GAMCO Investors Inc., an active equity manager, uses Graham & Dodd analysis. Its approach hinges on identifying asset-rich companies that are selling at a discount to their private market value, and where a catalyst has emerged to display these values.

Mario J. Gabelli is chief investment officer; Douglas R. Jamieson is client contact.

Gardner & Preston Moss

1 Winthrop Square, Boston, Mass.
02110; (617) 482-6500

Total assets managed	$2,593,000,000
Total discretionary assets	$2,593,000,000
Discretionary tax-exempt	$2,033,000,000
International fixed-income assets	$102,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	157
Minimum separate account	$600,000
No. of portfolio managers	17
Size of research staff	3

Gardner & Preston Moss Inc. is an active equity, active fixed-income and balanced manager.

The firm evaluates economic valuation and technical factors to determine equity commitments. Sector allocation is determined by analysis of key variables, and stock selection is based on a combination of fundamentals and valuation.

Its fixed-income approach stresses interest rate anticipation and sector analysis. The firm actively alters maturities and sector exposures based on a disciplined analysis of both valuation and fundamental trends.

G. Kinnear Pash is chief investment officer; Sue-Ellen Whelan is client contact.

Garrett Realty Advisors

1509 Main St., Suite 1105, Dallas,
Texas 75201; (214) 749-7777

Total assets managed	$257,000,000
Total discretionary assets	$257,000,000
Discretionary tax-exempt	$257,000,000
Equity real estate assets	$232,000,000
Mortgage assets	$25,000,000
Types of accounts managed	C
Tax-exempt clients	5
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	4

Garrett Realty Advisors, a real estate manager, provides a narrowly defined range of real estate services, specializing in institutional-grade properties distributed regionally.

Joseph P. Garrett is client contact.

Garrison, Keogh & Co. Inc.

122 E. 42nd St., New York, N.Y.
10168; (212) 557-7440

Total assets managed	$180,000,000
Total discretionary assets	$180,000,000
Discretionary tax-exempt	$120,000,000
Types of accounts managed	CEFU
Tax-exempt clients	15
Minimum separate account	$2,000,000
No. of portfolio managers	3

Garrison, Keogh & Co. Inc., an active equity and balanced manager, uses emerging growth and low p/e stocks. Proprietary valuation screens are applied to a closely followed list of stocks with high returns, strong finances and low institutional ownership. Cash reserves are used to preserve capital. Bonds are bought only when risk/reward is favorable. Convertibles and selected high-yield issues are used.

William Garrison, Thomas F. Keogh and William Bradford III are chief investment officers; Mr. Bradford is client contact.

Gateway Investment Advisers Inc.

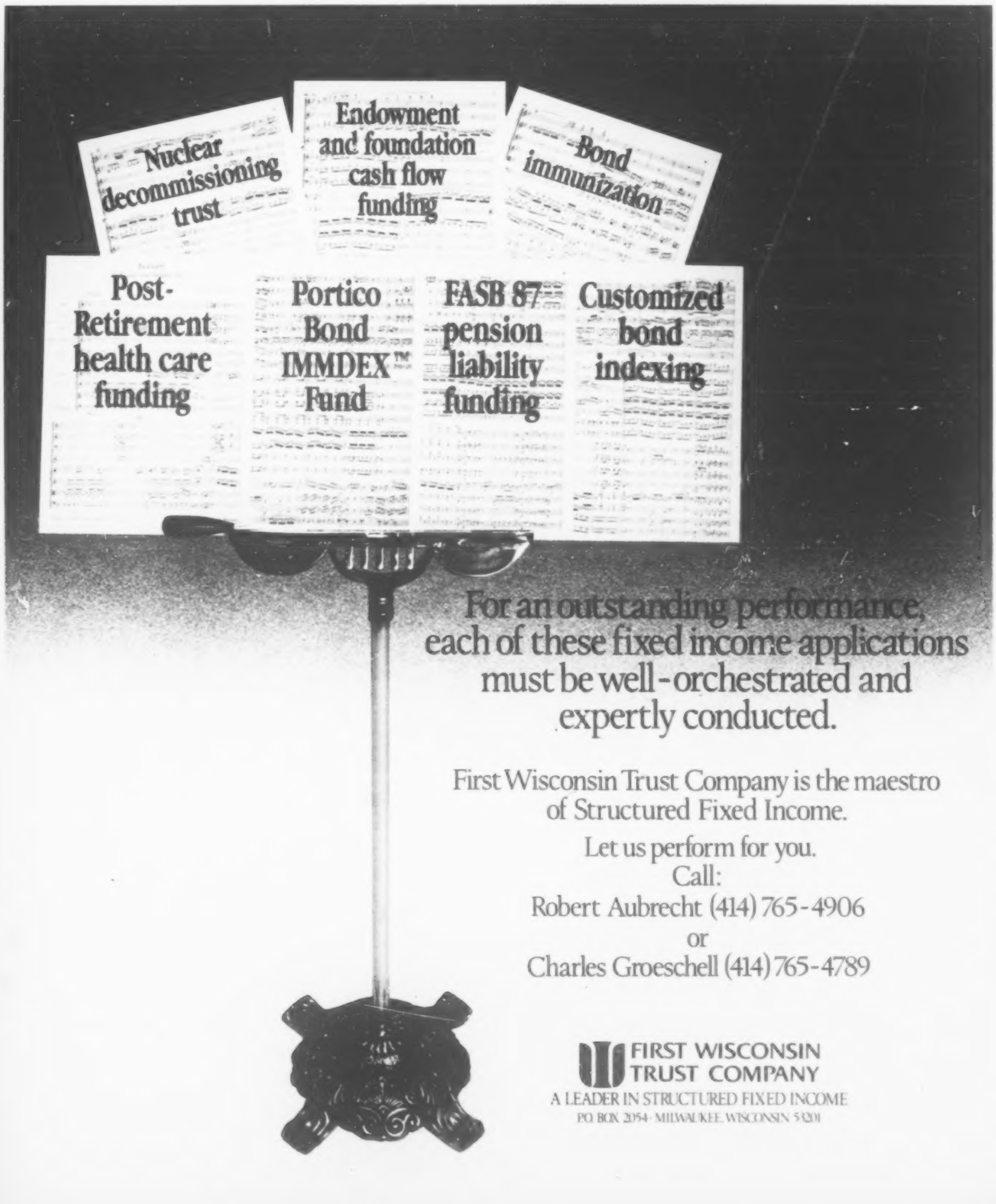
400 Technecenter Drive, Cincinnati,
Ohio 45150; (513) 248-2700

Total assets managed	$347,000,000
Total discretionary assets	$347,000,000
Discretionary tax-exempt	$125,000,000
Types of accounts managed	CFG
Tax-exempt clients	31
Minimum separate account	$3,000,000
No. of portfolio managers	3

Gateway Investment Advisers Inc. is an active equity, active fixed-income, short term and balanced manager.

Its primary strategy is dividend capture. It uses a computer program to evaluate stock prices and volume prior to ex-dividend dates. Options are used.

Walter G. Sall is chief investment officer; J. David Cummings is client contact.



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G.E. Investments
3003 Summer St., Stamford, Conn.
06905; (203) 326-2316

Total assets managed	[illegible]
Total discretionary assets	[illegible]
Discretionary tax-exempt	[illegible]
401(k)/457 assets managed	[illegible]
Equity real estate assets	$1,094,000,000
Mortgage assets	$526,000,000
International equity assets	[illegible]
International fixed-income assets	[illegible]
International cash assets	$25,000,000
Equity indexed assets	[illegible]
Dedicated/immunized assets	[illegible]
Types of accounts managed	CFG
Tax-exempt clients	22
Minimum separate account	$10,000,000
No. of portfolio managers	15
Size of research staff	25

G.E. Investments is an active and passive equity, active fixed-income, balanced, real estate, active international/global equity and fixed-income, short-term and private placements manager.

Its equity approach stresses growth and quality together with sector concentration. Systematic portfolios are quantitatively driven and value-based.

Fixed-income portfolios are actively managed using a relative value approach to domestic vs. international bond diversifications.

In real estate, it makes direct investments in high-quality, well-located assets in major metropolitan areas.

Dale F. Frey is chief investment officer; G.R. Norman is client contact.

Geewax, Terker & Co.
99 Starr St., Phoenixville, Pa. 19460;
(215) 935-3000

Total assets managed	$3,100,000,000
Total discretionary assets	$3,100,000,000
Discretionary tax-exempt	$3,100,000,000
Types of accounts managed	CEFG
Tax-exempt clients	36
Minimum separate account	$25,000,000
No. of portfolio managers	3
Size of research staff	2

Geewax, Terker & Co., an active equity manager, blends quantitative valuation analysis with sector rotation among growth/value stocks.

John J. Geewax is chief investment officer and client contact.

General American Investors
330 Madison Ave., New York, N.Y.
10017; (212) 916-8408

Total assets managed	$1,010,000,000
Total discretionary assets	$628,000,000
Discretionary tax-exempt	$628,000,000
Types of accounts managed	CEFG
Tax-exempt clients	10
Minimum separate account	$10,000,000
No. of portfolio managers	3
Size of research staff	5

General American Investors, an active equity manager, has a fundamental analysis orientation and emphasizes growth stocks. It uses bottom-up stock selection and a three-year time frame with stocks having a 50% appreciation potential and minimum downside risk if potential isn't realized.

William J. Gedale is chief investment officer; James B. Book IV is client contact.

General American Life Insurance Co.
700 Market St., St. Louis, Mo. 63101;
(314) 231-1700

Total assets managed	$1,508,000,000
Total discretionary assets	$1,508,000,000
Discretionary tax-exempt	$1,508,000,000
Pooled accounts	$217,000,000
Separate accounts	$194,000,000
GICs	$744,000,000
Other	$353,000,000
401(k)/457 assets managed	$22,000,000
Mortgage assets	$223,000,000
Equity indexed assets	$60,000,000
Fixed-income indexed assets	$40,000,000
Tax-exempt clients:	
Pooled	224
Separate	3
Types of accounts managed	CU
Minimum separate account	$5,000,000
No. of portfolio managers	5
Size of research staff	3

General American Life Insurance Co. is an active and passive equity, active fixed-income, short-term and balanced manager.

Three pooled equity accounts are offered: an S&P 500 index fund; an NYSE low-cap fund; and an actively managed growth fund that employs Morgan Stanley Asset Management as the investment adviser.

In fixed income, it offers three pooled accounts: a publicly traded bond fund; a long-term bond fund; and a private placement bond fund.

The firm offers a commercial mortgage loan fund as a fixed-income alternative.

Leonard M. Rubenstein and Donald L. Smith are chief investment officers; Ronald O. Drury is client contact.

Geneva Capital Management
135 W. Wells St., Suite 640,
Milwaukee, Wis. 53203; (414)
224-6002

Total assets managed	$45,000,000
Total discretionary assets	$45,000,000
Discretionary tax-exempt	$40,000,000
401(k)/457 assets managed	$1,000,000
Types of accounts managed	C
Tax-exempt clients	43
Minimum separate account	$500,000
No. of portfolio managers	2

Geneva Capital Management is an active equity, active fixed-income and balanced manager.

Its equity approach focuses on growth stocks; emphasis is on companies with healthy balance sheets, market leadership positions, earnings dynamics, low-cost production and minimum annual sales of $100 million.

Bonds with maximum maturity of 10 years and minimum A rating are targeted; maturities are laddered.

William A. Priebe is chief investment officer; Amy S. Croen is client contact.

Geocapital Corp.
655 Madison Ave., New York, N.Y.
10021; (212) 935-0111

Total assets managed	$913,000,000
Total discretionary assets	$913,000,000
Discretionary tax-exempt	$819,000,000
Types of accounts managed	CEFG
Tax-exempt clients	23
Minimum separate account	$10,000,000
No. of portfolio managers	3

Geocapital Corp., an active equity manager, invests in small-cap companies using a combination of growth/technology and intrinsic value holdings. The combination reduces short-term volatility without sacrificing superior long-term return potential.

Irwin Lieber is chief investment officer; Fairfield Capital Associates, (203) 254-1215, is client contact.

GeoVest Advisors Inc.
245 Willowbrook Office Park, Fairport,
N.Y. 14450; (716) 248-5050

Total assets managed	$36,000,000
Total discretionary assets	$36,000,000
Discretionary tax-exempt	$5,000,000
Types of accounts managed	CEF
Tax-exempt clients	7
Minimum separate account	$100,000
No. of portfolio managers	3
Size of research staff	2

GeoVest Advisors Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach emphasizes fundamental value based on the historical p/e multiples exhibited by industry groups and the expected future earnings of companies within an industry.

Its fixed-income approach is based on interest rate anticipation and expected macroeconomic variables trends; quality spread analysis is used to rank specific securities within each sector of the yield curve.

Robert E. Reeves is chief investment officer; Daniel E. Donnelly is client contact.

GIM Global Advisors Inc.
745 Broad St., Newark, N.J. 07102;
(201) 802-3889

Total assets managed	$63,000,000
Total discretionary assets	$63,000,000
Discretionary tax-exempt	$63,000,000
International equity assets	$54,000,000
International cash assets	$9,000,000
Types of accounts managed	C
Tax-exempt clients	3
No. of portfolio managers	3
Size of research staff	4

GIM Global Advisors Inc., an active international equity manager, uses a top-down and macroeconomic approach. Country selection and sector rotation emphasize markets and companies with accelerating earnings growth.

The firm provides clients with an exposure to international real estate by investing in the equity securities of international real estate companies.

Peter Zwart is chief investment officer; Joseph D. Reed is client contact.

Gintel Equity Management
Greenwich Office Park, Suite 6,
Greenwich, Conn. 06830; (203)
622-6400 or (800) 243-5808

Total assets managed	$225,000,000
Total discretionary assets	$86,000,000
Types of accounts managed	CEFU
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	3

Gintel Equity Management, an active equity manager, takes a value-oriented approach using low p/e and Graham & Dodd analysis. The firm looks for emerging growth stocks and is willing to concentrate in 25 stocks or less.

Robert Gintel is chief investment officer; A.L. Robinson Jr. is client contact.

The Glenmede Trust Co.
229 S. 18th St., Philadelphia, Pa.
19103; (215) 875-3200

Total assets managed	$5,800,000,000
Total discretionary assets	$5,400,000,000
Discretionary tax-exempt	$4,000,000,000
International equity assets	$95,000,000
Tax-exempt clients	38
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	8
Size of research staff	2

The Glenmede Trust Co. is an active equity, active fixed-income, balanced, active international/global equity and short-term manager.

Its value-oriented equity approach is enhanced by earnings expectation and price momentum.

Its fixed-income approach uses governments, agencies and mortgage-backed securities, buying high-quality issues to eliminate credit risk and using sector swaps to find value.

John W. Church Jr. is chief investment officer; Charles Bradford is client contact.

Glickenhaus & Co.
6 E. 43rd St., New York, N.Y. 10017;
(212) 953-7800

Total assets managed	$1,900,000,000
Total discretionary assets	$1,900,000,000
Discretionary tax-exempt	$1,500,000,000
401(k)/457 assets managed	$15,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	84
Minimum separate account	$4,000,000
No. of portfolio managers	10
Size of research staff	3

Glickenhaus & Co. is an active equity, active fixed-income and balanced manager.

Its risk-averse equity approach emphasizes preservation of capital. It uses a bottom-up stock selection process incorporating themes to identify opportunities. Fundamental analysis evaluates downside risk vs. profit potential. Stock characteristics include low p/e, high yield and low price to sales.

Its risk-conscious fixed-income approach uses interest rate anticipation, analyzing credit and maturity in relation to economic conditions, investing in high-quality issues.

Seth M. Glickenhaus is chief investment officer; Connie Moak Mazur is client contact.

Globe Finlay Inc.
200 Park Ave., New York, N.Y. 10166;
(212) 557-7022

Total assets managed	$1,332,000,000
Discretionary tax-exempt	$701,000,000
International equity assets	$614,000,000
International cash assets	$6,000,000
Types of accounts managed	CEFG
Tax-exempt clients	15
Minimum separate account	$20,000,000
No. of portfolio managers	9
Size of research staff	2

Globe Finlay Inc. is an active international/global equity and balanced manager.

The firm is an active allocator with a stock-selection discipline based on identifying companies with sustainable earnings growth rates priced at a discount to local market valuation criteria.

Francis Finlay is chief investment officer; Frances Dakers and Maureen White are client contacts.

GMO Woolley Ltd.
Winchester House, 77 London Wall,
London Wall, London ECN 1BE,
U.K.; 01-588-7753

See entry for GRANTHAM, MAYO, VAN OTTERLOO & CO.

Gofen & Glossberg Inc.
455 Cityfront Plaza, Suite 3000,
Chicago, Ill. 60611; (312) 828-1100

Total assets managed	$8,870,000,000
Total discretionary assets	$7,966,000,000
Discretionary tax-exempt	$430,000,000
Types of accounts managed	CF
Minimum separate account	$1,000,000
No. of portfolio managers	8
Size of research staff	5

Gofen & Glossberg Inc. is an active and passive equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach stresses a total return concept, using valuation techniques emphasizing the relationship of p/e ratios to anticipated growth rates.

Its fixed-income approach uses interest rate anticipation, seeking the maximum rate of return consistent with minimum volatility of principal values.

William H. Gofen is chief investment officer; Mark R. Goodman is client contact.

Goldman Sachs Asset Management
32 Old Slip, 34th Floor, New York,
N.Y. 10005; (212) 902-0800

Total assets managed	$16,679,000,000
Total discretionary assets	$15,621,000,000
Discretionary tax-exempt	$2,779,000,000
401(k)/457 assets managed	$111,000,000
Dedicated/immunized assets	$866,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	141
Minimum separate equity account	$15,000,000
Minimum separate bond account	$20,000,000
No. of portfolio managers	16

Goldman Sachs Asset Management is an active and passive equity, active fixed-income, balanced and short-term manager.

Its active equity approach is value-oriented, combining company and macro analysis. Its quantitative equity approach relies on proprietary, computer-directed, non-discretionary systems for stock selection and portfolio construction.

Its fixed-income approach seeks to enhance customized portfolios through the application of advanced quantitative management techniques to portfolio structure, sector weighting and selection of individual securities.

Leon Cooperman is chief investment officer. Larry A. Kohn is client contact for equities; Robert B. Zink is client contact for fixed income.

J.C. Goodgal Inc.
600 Park Ave., Paterson, N.J. 07504;
(201) 278-2327

Total assets managed	$6,000,000
Total discretionary assets	$6,000,000
Discretionary tax-exempt	$4,000,000
Types of accounts managed	CF
Tax-exempt clients	18
Minimum separate account	$100,000
No. of portfolio managers	1

J.C. Goodgal Inc., an active equity and balanced manager, follows a value-oriented approach focusing on low p/e, low price/cash flow and price/private market value ratios. Return on equity in excess of 12% and low debt/capital also are important.

The firm's fixed-income approach is passive, focusing on structured maturities.

Jay Charles Goodgal is chief investment officer and client contact.

Goodwin Capital Management
7007 Lafayette Ave., Fort Washington,
Pa. 19034; (215) 542-0282

Total assets managed	$0
Discretionary tax-exempt	$0
Minimum separate account	$1,000,000
No. of portfolio managers	1
Size of research staff	1

Goodwin Capital Management, formerly Harvest Capital Management, is an active equity manager.

Its equity approach uses yield and momentum factors to achieve capital appreciation through a highly disciplined methodology based on the belief that dividends and their relative yield are the most reliable determinants of high total return.

Thomas G. Evans is chief investment officer and client contact.

Gradison Investment Advisors
580 Walnut St., Cincinnati, Ohio
45202; (513) 579-5866

Total assets managed	$300,000,000
Total discretionary assets	$285,000,000
Discretionary tax-exempt	$160,000,000
Types of accounts managed	CEFGU
Minimum separate account	$500,000
No. of portfolio managers	6
Size of research staff	1

Gradison Investment Advisors is an active equity and passive fixed-income manager.

Its equity approach is growth- and value-oriented, using quantitative techniques. The approach is earnings driven and disciplined. Its fixed-income approach is passive, using government and agency securities in staggered maturities.

Graistone Realty Advisors
300 River Place, Suite 2050, Detroit,
Mich. 48207; (313) 259-9479

Total assets managed	$10,000,000
Total discretionary tax-exempt	$10,000,000
Equity real estate assets	$10,000,000
Types of accounts managed	C
Minimum separate account	$10,000,000
No. of portfolio managers	2
Size of research staff	3

Graistone Realty Advisors Inc. is a real estate manager.

The firm seeks to provide an optimal allocation for a separate account and/or co-investment strategy intended to identify specific product type and location, which when added to the portfolio of current real estate investments, completes that portfolio.

Charles E. Allen is chief investment officer; David McKinney is client contact.

Granahan Investment Management Inc.
303 Wyman St., Waltham, Mass.
02154; (617) 890-4412

Total assets managed	$84,000,000
Total discretionary assets	$42,000,000
Discretionary tax-exempt	$42,000,000
Types of accounts managed	CEF
Tax-exempt clients	1
Minimum separate account	$5,000,000
No. of portfolio managers	1
Size of research staff	3

Granahan Investment Management Inc., an active equity manager, emphasizes investments in small companies.

John J. Granahan is chief investment officer; Jane M. White is client contact.

Grantham, Mayo, Van Otterloo & Co.
40 Rowes Wharf, Boston, Mass.
02110; (617) 330-7500

Total assets managed	$7,242,000,000
Discretionary tax-exempt	$6,454,000,000
International equity assets	$2,437,000,000
Types of accounts managed	CEF
Tax-exempt clients	101
Minimum separate account	$50,000,000
No. of portfolio managers	7
Size of research staff	14

Grantham, Mayo, Van Otterloo & Co. is a domestic, international and global equity manager with an emphasis on value investing.

The firm's domestic offerings include actively managed equity (currently closed), quantitatively managed equity and domestic growth equity funds, and a South Africa-free fund.

The international equity offerings include active management (currently closed), quantitative management and a Japan-only fund. Quantitative models are used for stock selection and country allocation.

Jeremy Grantham, Richard Mayo and Eyk Van Otterloo are chief investment officers. Susan Randall Harvey is client contact.

The assets above reflect the assets of the following subsidiary:

- GMO Woolley Ltd. manages $382 million in assets for U.K. institutions, using quantitative methods to manage both equity and bond portfolios. The firm follows a value approach and its quantitative research is coordinated with its parent.

Paul Woolley is chief investment officer and client contact. He may be reached in London at 01-588-7753.

R.W. Graybill Ltd.
568 Spring Road, Elmhurst, Ill. 60126;
(708) 941-9460

Total assets managed	$55,000,000
Total discretionary assets	$55,000,000
Discretionary tax-exempt	$37,000,000
Types of accounts managed	CF
Tax-exempt clients	30
Minimum separate account	$250,000
No. of portfolio managers	2
Size of research staff	2

R.W. Graybill Ltd. is an active equity, passive fixed-income and balanced manager.

The firm uses fundamental analysis, quantitative measures of valuation, bottom-up selection and growth stocks.

R.W. Graybill is chief investment officer and client contact.

Great-West Life Assurance
8505 E. Orchard Road-7T1,
Englewood, Colo. 80111; (303)
889-3000

Total assets managed	$16,306,000,000
Total discretionary assets	$15,115,000,000
Discretionary tax-exempt	$7,023,000,000
Pooled accounts	$322,000,000
GICs	$1,685,000,000
Annuities	$362,000,000
Other	$4,654,000,000
401(k)/457 assets managed	$1,088,000,000
Types of accounts managed	CEFGU
No. of portfolio managers	7
Size of research staff	350

Great-West Life Assurance Co. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach focuses on growth stocks. Its fixed-income approach is based on interest rate anticipation and sector and yield curve analyses. Privately placed bonds and commercial mortgages are core holdings, supplemented by an aggressively traded public bond portfolio.

John T. Hughes is chief investment officer; Graham R. McDonald is client contact.

David J. Greene and Co.
30 Wall St., New York, N.Y. 10005;
(212) 344-5180

Total assets managed	$1,358,000,000
Total discretionary assets	$1,337,000,000
Discretionary tax-exempt	$1,056,000,000
Types of accounts managed	CEFU
Tax-exempt clients	99
Minimum separate account	$1,000,000
No. of portfolio managers	6
Size of research staff	11

David J. Greene and Co., an active equity manager, invests in undervalued stocks at prices that do not reflect earnings power, cash flow and asset values, with particular emphasis on special situation stocks.

Alan I. Greene is chief investment officer; Erwin A. Zeuschner is client contact.

Greenleaf Capital Management
20600 Chagrin Blvd., 803 Tower East,
Shaker Heights, Ohio 44122; (216)
752-8900

Total assets managed	$454,000,000
Total discretionary assets	$454,000,000
Discretionary tax-exempt	$399,000,000
401(k)/457 assets managed	$1,000,000
International equity assets	$18,000,000
Types of accounts managed	CF
Tax-exempt clients	73
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	3

Greenleaf Capital Management is an active equity, active international/global equity and balanced manager.

Its primary equity approach emphasizes inefficiently priced emerging growth and low p/e stocks.

The primary fixed-income approach uses interest rate anticipation, investing in intermediate high-quality bonds.

Geofrey J. Greenleaf is chief investment officer; Ronald J. Lang is client contact.

Greenville Capital Management Inc.
P.O. Box 4589, Greenville, Del. 19807;
(302) 429-9799

Total assets managed	$5,000,000
Total discretionary assets	$5,000,000
Discretionary tax-exempt	$0

Minimum separate account	$250,000
No. of portfolio managers	1
Size of research staff	1

Greenville Capital Management Inc., an active equity manager, looks for stocks with more than 20% growth, and p/es less than 15 times the ensuing years estimate.

Charles S. Cruice is chief investment officer and client contact.

Greenwood Capital Associates Inc.

P.O. Box 3181, Greenwood, S.C.
29648; (803) 229-2571

Total assets managed	$282,000,000
Total discretionary assets	$282,000,000
Discretionary tax-exempt	$180,000,000
401(k)/457 assets managed	$17,000,000
Equity real estate	$1,000,000
International equity assets	$4,000,000
International fixed-income assets	$1,000,000
Types of accounts managed	CEF
Tax-exempt clients	36
Minimum separate account	$250,000
No. of portfolio managers	3

Greenwood Capital Associates Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is value-oriented, using growth and low p/e stocks, sector rotation, Graham & Dodd analysis and market timing/tactical asset allocation. Its fixed-income approach is conservative, driven by interest rate anticipation and sector analysis. Options are used.

William B. Allin is chief investment officer and client contact.

Grosvenor International

2100-1040 W. Georgia St., Vancouver,
B.C. V6E 4H1; (604) 683-1141

Total assets managed	$2,200,000,000
Total discretionary assets	$2,200,000,000
Discretionary tax-exempt	$0

Grosvenor International, a Canadian firm, is an equity real estate manager that invests primarily in regional shopping centers and central business district office buildings in major cities.

Daryl J.A. Delmotte is chief investment officer; David A. Fitzgerald is client contact.

Growth Stock Outlook Inc.

4405 East-West Highway, Bethesda,
Md. 20814; (301) 654-5205

Total assets managed	$407,000,000
Total discretionary assets	$407,000,000
Discretionary tax-exempt	$407,000,000
International equity assets	$16,000,000
Types of accounts managed	C
Tax-exempt clients	665
Minimum separate account	$175,000
No. of portfolio managers	1
Size of research staff	6

Growth Stock Outlook Inc., an active equity manager, focuses on growth and emerging growth stock, using Graham & Dodd analysis.

Charles Allmon is chief investment officer and client contact.

Grubb & Ellis Realty Advisers

1 Montgomery St., Telesis Tower,
Suite 3200, San Francisco, Calif.
94104; (415) 956-1990

Total assets managed	$723,000,000
Total discretionary assets	$489,000,000
Discretionary tax-exempt	$234,000,000
Equity real estate	$234,000,000
Types of accounts managed	CG
Tax-exempt clients	13
Minimum separate account	$25,000,000
No. of portfolio managers	4
Size of research staff	2

Grubb & Ellis Realty Advisers, a real estate manager, uses a research-oriented approach, concentrating on markets demonstrating above-average growth with sufficient depth to ensure liquidity and business diversification to minimize exposure to single industries. It focuses on redevelopment, renovation and re-leasing of undermanaged and underused properties.

James Proud is chief investment officer; James Cote is client contact.

Gryphon Investment Counsel Inc.

2000 Peel St., Suite 710, Montreal,
Quebec H3A 2W5; (514) 288-4122

Total assets managed	$5,977,000,000
Total discretionary assets	$5,977,000,000
Discretionary tax-exempt	$5,977,000,000
For subsidiaries of U.S. firms	$1,132,000,000
Tax-exempt clients	75
Types of accounts managed	CEFGU
Minimum separate account	$50,000,000
No. of portfolio managers	7
Size of research staff	2

Gryphon Investment Counsel Inc., a Canadian firm, is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach uses sector rotation, market timing and fundamental analysis. Stock selection within sectors is dependent upon in-house research.

Its fixed-income approach emphasizes active interest rate timing, with goals of preservation and enhancement of capital. Concentration is in high-quality marketable bonds and cash, when appropriate.

George B. Kiddell is chief investment officer; Ronald E.F. Kaulbach is client contact.

G.T. Capital Management

50 California St., 27th Floor, San
Francisco, Calif. 94111; (415)
392-6181

Total assets managed	$8,451,000,000
Discretionary tax-exempt	$444,000,000
International equity assets	$444,000,000
Types of accounts managed	CF
Tax-exempt clients	5
Minimum separate account	$10,000,000
No. of portfolio managers	33
Size of research staff	5

G.T. Capital Management Inc. is an active domestic and international equity and fixed-income

Pensions & Investments' annual survey of money managers' foreign business will be published July 23.

What good is a great retirement plan if it's mismanaged?

No amount of return is worth the hassle of a 401(k) with lousy recordkeeping. After all, the bulk of your funds are in GIC investment options to begin with.

That's why at IDS Trust, the first thing we promise is recordkeeping that's timely, accurate, and flexible to your needs. You expect it, and we guarantee it.

We also offer Total Daily Processing. That means Total—even on GICs. And when it comes to GICs, we have the oldest, most successful pooled GIC fund in the business.

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and short-term manager.

Its equity approach emphasizes early identification of major international trends, targeting appropriate countries and companies through which to exploit these trends. It seeks growth companies with undiscounted earnings acceleration. Its fixed-income approach focuses on currency management, emphasizing flexible maturity rates. Options and fixed-income futures are used.

F. Christian Wignall is chief investment officer; David Minella is client contact.

The Guaranty Trust Co. of Missouri

7701 Forsyth, Suite 1200, St. Louis,
Mo. 63105; (314) 725-9055

Total assets managed	$248,000,000
Total discretionary assets	$248,000,000
Discretionary tax-exempt	$37,000,000
Separate accounts	$37,000,000
Tax-exempt clients	43
Types of accounts managed	CFG
Minimum separate account	$300,000
No. of portfolio managers	3

The Guaranty Trust Co. of Missouri is an active equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

Its equity approach emphasizes growth stocks. Its fixed-income approach is based on interest rate anticipation and sector analysis.

David H. Eckles and Randy J. Schofield are chief investment officers. Jack A. Dempsey is client contact.

Guardian Capital Inc.

110 Yonge St., 18th Floor, Toronto,
Ontario M5C 1T4; (416) 364-8341

Total assets managed	$1,340,000,000
Total discretionary assets	$1,340,000,000
Discretionary tax-exempt	$587,000,000
For subsidiaries of U.S. firms	$168,000,000
Dedicated/immunized assets	$120,000,000
Tax-exempt clients	32
U.S. subsidiaries	6
Types of accounts managed	CFG
Minimum separate account	$10,000,000
No. of portfolio managers	11
Size of research staff	4

Guardian Capital Inc., a Canadian firm, is an active domestic and international equity and fixed-income, balanced and short-term manager.

Its equity approach stresses core management with a value-adding, medium-cap tilt. Its fixed-income approach uses interest rate anticipation and emphasizes management of duration, sector weightings, currency exposure and opportunity trading.

Mark A.F. Golding is chief investment officer and client contact.

Guardian Timing Services

74 Victoria St., Third Floor, Toronto,
Ontario M5C 2A5; (416) 863-1100

Total assets managed	$10,000,000
Total discretionary assets	$10,000,000
Discretionary tax-exempt	$10,000,000
Types of accounts managed	C
No. of portfolio managers	1

Guardian Timing Services Inc., a Canadian firm, is an active equity manager.

The firm offers market timing and portfolio insurance services, applying those techniques to equity indexed funds.

Jean-Pierre Fruchet is chief investment officer and client contact.

Guild Investment Management Inc.

22761 Pacific Coast Highway, Suite
226, Malibu, Calif. 90265; (213)
456-8100

Total assets managed	$95,000,000
Total discretionary assets	$95,000,000
Discretionary tax-exempt	$40,000,000
International equity assets	$10,000,000
Types of accounts managed	CEF
Tax-exempt clients	30
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	2

Guild Investment Management Inc. is an active equity, balanced and active international equity manager.

Its top-down equity approach is used to define macroeconomic trends, identifying industries and stocks with rising earnings and price momentum that are benefiting from those trends. Options are used. Its fixed-income approach emphasizes duration modifications based on secular interest rate projections; high-quality securities are used.

Montague Guild Jr. is chief investment officer; Allen Teague is client contact.

Gulf Investment Management Inc.

820 Gessner, Suite 720, Houston,
Texas 77024-4258; (713) 461-0660

Total assets managed	$434,000,000
Total discretionary assets	$404,000,000
Discretionary tax-exempt	$358,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	25
Minimum separate account	$1,000,000
No. of portfolio managers	3

Gulf Investment Management Inc., an active equity and balanced manager, uses a Graham & Dodd intrinsic value approach, with an emphasis on out-of-favor securities. Two investment disciplines underlie its buy/sell decisions.

Thomas G. Macrini is chief investment officer; T. Charles Toomey is client contact.

H

Ronald B. Haave Associates

270 Madison Ave., Suite 1302, New
York, N.Y. 10016; (212) 889-4477

Total assets managed	$43,000,000
Total discretionary assets	$43,000,000
Discretionary tax-exempt	$43,000,000
Types of accounts managed	CF
Tax-exempt clients	8
Minimum separate account	$1,000,000
No. of portfolio managers	1
Size of research staff	2

Ronald B. Haave Associates Inc., an active and passive equity manager, targets undervalued stocks in relatively undervalued industries before positive changes in economic trends. It uses Graham & Dodd analysis and sector rotation, and emphasizes corporate cash flow and research and development.

Ronald B. Haave is chief investment officer and client contact.

Hagler, Mastrovita & Hewitt

1 International Place, Suite 3190,
Boston, Mass. 02110; (617)
439-0440

Total assets managed	$1,699,000,000
Total discretionary assets	$1,699,000,000
Discretionary tax-exempt	$1,474,000,000
401(k)/457 assets managed	$108,000,000
International equity assets	$19,000,000
Types of accounts managed	CEFG
Tax-exempt clients	20
Minimum separate account	$50,000,000
No. of portfolio managers	3

Hagler, Mastrovita & Hewitt Inc. is an active equity and balanced manager.

Its equity approach identifies value, concentrating on major decisions and careful attention to risk management.

Its fixed-income approach is focused on quality and maturity decisions, comparing expected returns and risks across the market spectrum.

Robert P. Mastrovita is chief investment officer; Jon L. Hagler is client contact.

Hahn Holland & Grossman

180 N. Wacker Drive, Suite 350,
Chicago, Ill. 60606; (312) 984-3580

Total assets managed	$665,000,000
Total discretionary assets	$665,000,000
Discretionary tax-exempt	$555,000,000
Equity indexed assets	$174,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	34
Minimum separate account	$500,000
No. of portfolio managers	4
Size of research staff	5

Hahn, Holland & Grossman is an active and passive equity, active fixed-income and balanced manager.

Its equity approach emphasizes conserving capital in falling markets. The firm uses a top-down method, concentrating on evaluation of market direction, identification of attractive industries and large cap, value-oriented stocks. Stock index futures are used.

Its fixed-income approach uses interest rate forecasts to structure portfolios with long, intermediate or short obligations from government or AAA corporate securities, depending on yield spreads.

Donald Hahn is chief investment officer; Kenneth Grossman is client contact.

Hallmark Capital Management Inc.

1 Exchange Plaza, New York, N.Y.
10006; (212) 363-4480

Total assets managed	$170,000,000
Total discretionary assets	$170,000,000
Discretionary tax-exempt	$152,000,000
Types of accounts managed	CEFU
Tax-exempt clients	28
Minimum separate account	$3,000,000
No. of portfolio managers	2
Size of research staff	1

Hallmark Capital Management Inc. is an active equity and balanced manager.

Its value-oriented equity approach uses Graham & Dodd analysis and low p/e stocks. Its fixed-income approach uses interest rate anticipation.

Robert L. Ardizzone is chief investment officer; Peter S. Hagerman is client contact.

Hambrecht & Quist Equity Management

1 Bush St., San Francisco, Calif.
94104; (415) 986-5115

Total assets managed	$40,000,000
Discretionary tax-exempt	$40,000,000
Types of accounts managed	CE
Tax-exempt clients	7
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	3

Hambrecht & Quist Equity Management, an active equity manager, invests in emerging growth stocks. It focuses on small-cap, high growth stocks using both quantitative and qualitative measures.

Hambrecht & Quist Group is the limited partner.

Michael T. Jackson is chief investment officer; Aaron Braun is client contact.

Hamilton, Allen & Associates Inc.

229 Peachtree Road N.E., Atlanta, Ga.
30303; (404) 659-6060

Total assets managed	$900,000,000
Total discretionary assets	$900,000,000
Discretionary tax-exempt	$825,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	113
Minimum separate account	$5,000,000
No. of portfolio managers	5
Size of research staff	2

Hamilton, Allen & Associates Inc., formerly Wall, Patterson, Hamilton & Allen Inc., is an active equity, active fixed-income and balanced manager.

Its equity approach is based on selecting superior growth companies from a pre-screened universe based on earnings and valuation criteria.

Its fixed-income approach is based on yield curve analysis, using only Treasury and agency securities.

Samual E. Allen and Roger C. Hamilton are chief investment officers; William M. Robertson is client contact.

Hamilton Investments Inc.

2 N. LaSalle St., Chicago, Ill. 60602;
(312) 444-2100

Total assets managed	$200,000,000
Discretionary tax-exempt	$150,000,000
Tax-exempt clients	40
Types of accounts managed	CFU
Minimum separate account	$1,000,000
No. of portfolio managers	5
Size of research staff	3

Hamilton Investments Inc., formerly Illinois Co. Investments Inc., is an active equity and fixed-income, balanced and short-term manager.

Its equity approach emphasizes emerging growth and quality growth stocks.

Paul H. Fricke is chief investment officer and client contact.

John Hancock Capital Growth Management

1138 Taylor St., San Francisco, Calif.
94108; (415) 775-9400

See entry for JOHN HANCOCK FINANCIAL SERVICES.

John Hancock Energy Resources Management

John Hancock Financial Services,
P.O. Box 111, Boston, Mass. 02117;
(617) 572-4520

See entry for JOHN HANCOCK FINANCIAL SERVICES.

John Hancock Financial Services

P.O. Box 111, Boston, Mass. 02117;
(617) 572-4520

Total assets managed	$52,168,000,000
Total discretionary assets	$52,168,000,000
Discretionary tax-exempt	$17,598,000,000
Pooled accounts	$1,393,000,000
Separate accounts	$1,311,000,000
GICs	$8,385,000,000
Annuities	$1,969,000,000
Other	$4,540,000,000
401(k)/457 assets managed	$7,214,000,000
Equity real estate assets	$753,000,000
Mortgage assets	$6,042,000,000
International equity assets	$19,000,000
Tax-exempt clients	
Pooled	289
Separate	12
Types of accounts managed	CEFGU

John Hancock Financial Services, through its subsidiaries, is an equity, fixed-income, balanced, real estate, international, short-term, GIC, venture capital, timber, private placements, capital growth and alternative energy manager. Options and fixed-income futures are used.

Equity and fixed-income investments are managed by Independence Investment Associates, profiled separately in this issue.

Foster L. Aborn is chief investment officer; George F. Miller is client contact.

Five subsidiaries' assets are included in the data above.

- John Hancock Properties, a real estate manager, manages $236 million in tax-exempt assets.

The firm offers a full range of equity-oriented investments, including pooled and individual accounts, joint ventures and direct investments in commercial real estate.

Kevin McGuire is chief investment officer; James H. Patterson is client contact.

- The Hancock Timber Resource Group manages $542 million in tax-exempt assets.

The firm provides active management of timber real estate investments through an affiliation with two nationally recognized forestry firms. Both pooled and individual accounts are offered.

William R. Gordon is chief investment officer; Richard Smith is client contact.

- John Hancock Venture Capital manages $886 million in tax-exempt assets.

Diversification is achieved by direct investment in venture capital companies and other venture capital partnerships, as well as through investment in various stages of development, industry and geography. Pooled and individual accounts are offered.

Edward Kane and Brooks Zug are managing directors; Endicott Peabody Jr. is client contact.

- John Hancock Capital Growth manages $258 million in tax-exempt assets.

It offers mezzanine financing primarily to privately held, emerging, non-high-tech companies.

Dexter B. Dawes is chief investment officer; Mr. Peabody is client contact.

- John Hancock Energy Resources Management Inc., a co-owner with three general partners, manages $160 million in assets. Funds are invested in independent power projects.

John Hancock Properties

2 Copley Place, Suite 200, Boston,
Mass. 02117; (617) 572-3822

See entry for JOHN HANCOCK FINANCIAL SERVICES.

John Hancock Timber Resource Group

John Hancock Financial Services,
P.O. Box 111, Boston, Mass. 02117;
(617) 572-4525

See entry for JOHN HANCOCK FINANCIAL SERVICES.

John Hancock Venture Capital Management Inc.

1 Financial Center, Boston, Mass.,
02111; (617) 350-4002

See entry for JOHN HANCOCK FINANCIAL SERVICES.

Hanson Investment Management

4000 Civic Center Drive, Suite 200,
San Rafael, Calif. 94903; (415)
499-1400

Total assets managed	$948,000,000
Total discretionary assets	$948,000,000
Discretionary tax-exempt	$812,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	25
Minimum separate account	$3,000,000
No. of portfolio managers	4
Size of research staff	1

Hanson Investment Management, an active equity and balanced manager, uses Graham & Dodd principles and emphasizes low p/e stocks in its value-oriented, bottom-up equity approach. Its fixed-income approach uses interest rate anticipation.

Herbert M. Hanson Jr. is chief investment officer and client contact.

Harbor Capital Management

265 Franklin St., Boston, Mass. 02110;
(617) 439-4500

Total assets managed	$1,307,000,000
Total discretionary assets	$1,307,000,000
Discretionary tax-exempt	$927,000,000
Tax-exempt clients	76
Minimum separate account	$10,000,000
No. of portfolio managers	7
Size of research staff	4

Harbor Capital Management Co. Inc. is an active and passive equity, active and passive fixed-income and balanced manager.

Its equity approach emphasizes growth and low p/e stocks, using a disciplined, "bond-competitive" decision-making process and strong fundamental research. Its fixed-income approach is conservative, stressing a real rate of return using fundamental economic and interest rate analyses.

Frederick G.P. Thorne is chief investment officer; E. William Hansen and William S. Peck are client contacts.

Harris Associates L.P.

2 N. LaSalle, Chicago, Ill. 60602; (312)
621-0600

Total assets managed	$3,962,000,000
Total discretionary assets	$3,962,000,000
Discretionary tax-exempt	$1,651,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	185
Minimum separate account	$5,000,000
No. of portfolio managers	9
Size of research staff	11

Harris Associates L.P., an active equity and balanced manager, takes a value-oriented approach that produces portfolios with p/e and price/book ratios less than market, yield and ROE greater than market and positive-low volatility rates of return. Its fixed-income approach is passive.

Myron R. Szold is chief investment officer; Albert A. Pisterzi is client contact.

Harris Bretall Sullivan & Smith Inc.

1 Post St., Suite 2300, San Francisco,
Calif. 94104; (415) 391-8040

Total assets managed	$548,000,000
Total discretionary assets	$478,000,000
Discretionary tax-exempt	$426,000,000
Types of accounts managed	CEFG
Tax-exempt clients	51
Minimum separate account	$500,000
No. of portfolio managers	6
Size of research staff	3

Harris Bretall Sullivan & Smith Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach combines a disciplined selection process, focusing on growth stocks with strategic asset allocation. Its fixed-income approach uses interest rate anticipation and active yield curve analysis. Treasuries and agencies are purchased.

W. Graeme Bretall is chief investment officer; Lauryn A. Bierdeman is client contact.

Harris Derivative Investments Inc.

30 S. Wacker Drive, Suite 2816,
Chicago, Ill. 60606; (312) 461-6200

Total assets managed	$365,000,000
Total discretionary assets	$365,000,000
Discretionary tax-exempt	$365,000,000
Types of accounts managed	C
Tax-exempt clients	3
Minimum separate account	$15,000,000
No. of portfolio managers	2

Harris Derivative Investments Inc., an active equity and asset allocation control manager, provides enhanced core equity management by continuously holding the market in its most efficient form. Incremental returns are achieved on a consistent basis primarily through arbitrage and calendar spread trades in the derivative markets. Cash management is carefully integrated with outstanding future positions. Options and stock index futures are used.

Edward B. Dillman is chief investment officer; Stephen J. Knsik is client contact.

Harris Investment Management Inc.

P.O. Box 755, 190 S. LaSalle St.,
Chicago, Ill. 60690; (312) 461-7699

Total assets managed	$8,739,000,000
Total discretionary assets	$8,739,000,000
Discretionary tax-exempt	$8,739,000,000
401(k)/457 assets managed	$225,000,000
International equity assets	$33,000,000
Equity indexed assets	$400,000,000
Fixed-income indexed assets	$225,000,000
Dedicated/immunized assets	$400,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	735
No. of portfolio managers	14
Size of research staff	10

Harris Investment Management Inc. is an active and passive equity, active and passive fixed-income, balanced, tactical asset allocation, real estate, active international equity and short-term manager.

Its primary equity approach is quantitative, incorporating a multifactor model with a strong value emphasis.

Its fixed-income approach uses a structured decision-making process reliant on quantitative models to establish exposure in duration, term structure and sector/quality. Options and financial futures are used for select accounts.

John C. Kirscher is chief investment officer; Robert E. Vanden Boech and Randall C. Buck are primary client contacts.

Hartford Life Insurance Co.

P.O. Box 2999, Hartford, Conn.
06104-2999; (203) 843-8032

Total assets managed	$9,820,000,000
Total discretionary assets	$6,200,000,000
Discretionary tax-exempt	$4,500,000,000
Pooled accounts	$800,000,000
GICs	$2,400,000,000
Other	$1,300,000,000
401(k)/457 assets managed	$1,500,000,000
Equity real estate assets	$2,000,000
Mortgage assets	$93,000,000
Equity indexed assets	$17,000,000
Types of accounts managed	CEFGU
No. of portfolio managers	13

Hartford Life Insurance Co. is an active equity, active fixed-income, real estate and short-term manager.

Its equity approach emphasizes growth stocks. Long-term capital growth is obtained by maximizing the total return. Its fixed-income approach uses interest rate anticipation, and anticipates changes in the yield curve, quality spreads and maturities. Strategies are based on close analysis of the interplay between the economy and financial markets. Options and fixed-income futures are used.

In real estate, it seeks a rising annual yield as net income increases, in hopes of obtaining significant appreciation.

Edward N. Bennett is chief investment officer; Charles A. Clinton is client contact.

Haven Capital Management

655 Third Ave., New York, N.Y. 10017;
(212) 953-2335

Total assets managed	$605,000,000
Total discretionary assets	$550,000,000
Discretionary tax-exempt	$346,000,000
Dedicated/immunized assets	$12,000,000
Types of accounts managed	CEF
Tax-exempt clients	20
No. of portfolio managers	3

Haven Capital Management Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach is growth at a reasonable price, based on individual issue selection of undervalued companies. Historical data are examined to identify attractively priced companies with above-average characteristics.

Its fixed-income approach is based on interest rate anticipation derived from economic cycle analysis. Maturity selection is followed by sector and quality judgments to produce consistent competitive returns with low volatility.

Denis M. Turko is client contact.

Computer software: Aug. 6.

Hawaiian Trust Co. Ltd.

P.O. Box 3170, Honolulu, Hawaii
96802; (808) 538-4622

Total assets managed	$6,200,000,000
Total discretionary assets	$3,800,000,000
Discretionary tax-exempt	$1,400,000,000
Pooled accounts	$244,000,000
Separate accounts	$1,156,000,000
401(k)/457 assets managed	$60,000,000
Real estate equity assets	$14,000,000
International equity assets	$5,000,000
Tax-exempt clients	
Commingled	806
Separate	40
Types of accounts managed	CEFU
Minimum separate account	$1,000,000
No. of portfolio managers	10
Size of research staff	2

Hawaiian Trust Co. Ltd. is an active equity, active and passive fixed-income, balanced, real estate, passive international equity and short-term manager.

Its equity approach emphasizes growth stocks; earnings momentum surprises are weighted. In fixed income, it invests in Treasury bonds. Changes in maturity and duration are based on the firm's interest rate outlook.

William J. Barton is chief investment officer. Beverly Saco is client contact.

Hayden, Tolzmann & Associates Inc.

P.O. Drawer 708, Bloomfield, Conn.
06002; (203) 243-1481

Total assets managed	$71,000,000
Total discretionary assets	$18,000,000
Discretionary tax-exempt	$18,000,000
Equity real estate	$18,000,000
Types of accounts managed	CEG
Tax-exempt clients	1
Minimum separate account	$10,000,000
No. of portfolio managers	2
Size of research staff	2

Hayden, Tolzmann & Associates Inc., a real estate manager, stresses acquisition of existing, leased, income-producing real estate — leveraged and unleveraged — such as mixed-use, research and development, office, industrial and retail properties nationwide.

David C. Tolzmann is chief investment officer; Debra De Vries-Dalton is client contact.

HD International

126 E. 56th St., New York, N.Y.
10022; (212) 753-0600

Total assets managed	$986,000,000
Total discretionary assets	$986,000,000
Discretionary tax-exempt	$388,000,000
International equity assets	$375,000,000
International fixed income assets	$13,000,000
Types of accounts managed	CG
Tax-exempt clients	10
Minimum separate account	$10,000,000
No. of portfolio managers	7

HD International is an active international/global equity manager.

The firm focuses on growth for market allocation and stock selection. Market return forecasts are translated into market allocations concentrated in three or four markets using a quantitative model. Stocks are selected using strict valuation criteria.

James Heyworth-Dunne is chief investment officer.

Heartland Capital Management

36 S. Pennsylvania St., Suite 610,
Indianapolis, Ind. 46204; (317)
633-4080

Total assets managed	$406,000,000
Total discretionary assets	$406,000,000
Discretionary tax-exempt	$406,000,000
Types of accounts managed	CEFU
Tax-exempt clients	85
Minimum separate account	$1,000,000
No. of portfolio managers	4

Heartland Capital Management is an active equity, active fixed-income and balanced manager.

Its equity selection process is growth-oriented, with an emphasis on accelerating earnings per share.

Its fixed-income approach uses interest rate anticipation.

Barry F. Ebert is chief investment officer; Hilary S. Salatich is client contact.

Heber, Fuger, Wendin Inc.

180 Oakland, Suite 200, Birmingham,
Mich. 48009-3434; (313) 258-6866

Total assets managed	$2,900,000,000
Total discretionary assets	$225,000,000
Discretionary tax-exempt	$180,000,000
401(k)/457 assets managed	$4,000,000
Equity real estate	$1,000,000
Types of accounts managed	FG
Tax-exempt clients	7
Minimum separate account	$500,000
No. of portfolio managers	5

Heber, Fuger, Wendin Inc. is an active equity, active fixed-income, balanced, tactical asset allocation, short-term and asset-liability manager.

Its equity approach focuses on growth stocks, sector rotation, market timing/tactical asset allocation. Its fixed-income approach employs interest rate anticipation and sector analysis. Options are used.

Gordon Barnes is chief investment officer and client contact.

Real estate directory: Oct. 1.

Heilweil Hollander Jacobs

400 Perimeter Center Terraces, Suite
190, Atlanta, Ga. 30346; (404)
393-8725

Total assets managed	$110,000,000
Total discretionary assets	$110,000,000
Discretionary tax-exempt	$40,000,000
Types of accounts managed	CF
Tax-exempt clients	66
Minimum separate account	$500,000
No. of portfolio managers	3

Heilweil Hollander Jacobs Inc. is a active equity, active fixed-income, balanced and short-term manager.

In equities, the firm takes a defensive value approach, concentrating on capital preservation and appreciation. Investments are made when prospects for further price deterioration seem minimal with strong potential for significant appreciation. Options are used.

Marc S. Heilweil is chief investment officer; Brenda Domen is client contact.

Heitman Advisory Corp.

180 N. LaSalle St., Chicago, Ill. 60601;
(312) 855-5700

Total assets managed	$6,300,000,000
Total discretionary assets	$6,300,000,000
Discretionary tax-exempt	$5,715,000,000
Equity real estate assets	$5,715,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	70
Minimum separate account	$25,000,000
No. of portfolio managers	13
Size of research staff	5

Heitman Advisory Corp., an equity real estate manager, stresses selection and acquisition of existing, investment-quality, well-rented properties, including office buildings, shopping centers and industrial parks. This provides the potential for increased cash return on investments with limited risk. Property management and leasing are handled through an affiliate, Heitman Properties.

Norman Perlmutter is chief investment officer; David Glickman is client contact.

Hellman, Jordan Management Co. Inc.

50 Milk St. Boston, Mass. 02109; (617)
482-1777

Total assets managed	$1,196,000,000
Total discretionary assets	$1,196,000,000
Discretionary tax-exempt	$998,000,000
Types of accounts managed	CEFG
Tax-exempt clients	23
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	1

Hellman, Jordan Management Co. Inc., an active equity manager, is growth-oriented. The investment approach is characterized by concentration, risk aversion and intellectual flexibility. Options and stock index futures are used.

Gerald R. Jordan Jr. is chief investment officer; David M. Driscoll is client contact.

Henderson Administration Group PLC

3 Finsbury Ave., London EC2M 2PA,
U.K.; 01-638-5757

Total assets managed	$14,283,000,000
Total discretionary assets	$14,283,000,000
Discretionary tax-exempt	$0
Minimum separate account	$10,000,000
No. of portfolio managers	40

Henderson Administration Group PLC is an active equity, active fixed-income, balanced, active international/global equity and fixed-income and short-term manager.

The firm's top-down, global equity approach concentrates primarily on investing in fast-growing economies and markets. Stock selection focuses on earnings momentum leading to an emphasis on growth stocks.

Its global fixed-income approach concentrates on identifying relative value through forecasting both interest rate and currency rate movements. Both liquidity and quality are essential. The firm focuses primarily on sovereign debt.

Ben Wrey is chief investment officer; Richard Garland is client contact.

Heritage Investors Management Corp.

7101 Wisconsin Ave., Suite 1112,
Bethesda, Md. 20814; (301)
951-0440

Total assets managed	$201,000,000
Total discretionary assets	$201,000,000
Discretionary tax-exempt	$63,000,000
Types of accounts managed	CEF
Tax-exempt clients	92
Minimum separate account	$250,000
No. of portfolio managers	4

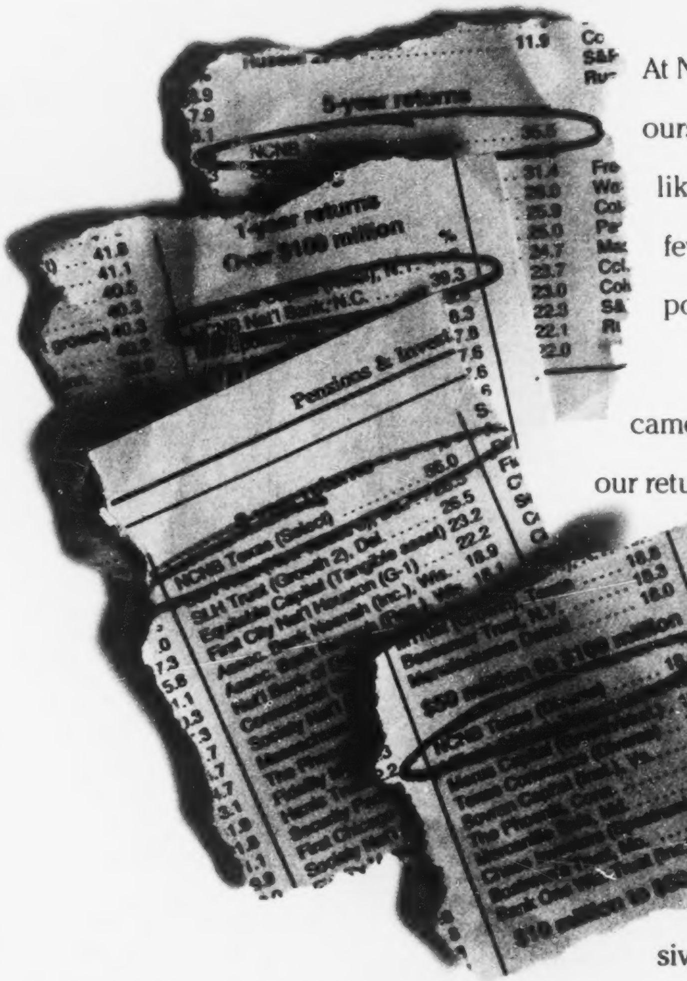
Heritage Investors Management Corp. is an active equity and active fixed-income manager.

Its bottom-up approach concentrates on medium- to large-capitalization undervalued stocks.

Its fixed-income approach focuses on interest rate anticipation. Securities have maturities of one to 15 years, and mainly are Treasuries and investment-grade corporate issues.

Michael Cornfeld is chief investment officer and client contact.

Rest Easy, Knowing Your Money Won't.



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Trust and Investment Services

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Hewitt Capital Management

500 Sansome St., Suite 800, San Francisco, Calif. 94111; (415) 397-9950

Total assets managed	$18,000,000
Total discretionary assets	$18,000,000
Discretionary tax-exempt	$283,000
Types of accounts managed	C
Tax-exempt clients	1
Minimum separate account	$1,000,000
No. of portfolio managers	1

Hewitt Capital Management Inc. is an active equity manager.

The firm uses a top-down disciplined process which seeks stocks with high earnings surprise valuation ranking and low p/e ratios. Portfolios are optimized against a universe of companies to efficiently identify rewards while managing risk.

D. Garry R. Hewitt is chief investment officer and client contact.

HGK Asset Management

17 State St., 15th Floor, New York, New York 10004; (212) 514-9800

Total assets managed	$750,000,000
Total discretionary assets	$750,000,000
Discretionary tax-exempt	$750,000,000
Types of accounts managed	CU
Tax-exempt clients	73
Minimum separate account	$1,000,000
No. of portfolio managers	6

HGK Asset Management, formerly Harris, Greenhouse, Kutzel Inc., is an active equity, active fixed-income, balanced and short-term manager.

Following its value-oriented equity approach, the firm buys out-of-favor issues that offer above-average growth potential.

Its fixed-income approach is based on interest rate anticipation, with a maturity schedule of 10 years or less.

Warren A. Greenhouse is chief investment officer; Joseph E. Kutzel is client contact.

Hibernia National Bank

P.O. Box 61540, New Orleans, La. 70161; (504) 586-5542

Total assets managed	$2,855,000,000
Total discretionary assets	$2,855,000,000
Discretionary tax-exempt	$2,132,000,000
Pooled accounts	$185,000,000
Separate accounts	$1,947,000,000
401(k)/457 assets managed	$294,000,000
Tax-exempt clients:	
Commingled	300
Separate	50
Types of accounts managed	CEFGU
Minimum separate account	$2,000,000
No. of portfolio managers	8
Size of research staff	3

Hibernia National Bank is an active equity, active fixed-income and balanced manager.

Its equity approach is based on a quantitative style, emphasizing earnings growth. Primary focus is equity selection in the context of a disciplined portfolio construction process.

Its fixed-income approach is based on inflation and interest rate forecasts. Credit analysis is used to minimize risk of quality deterioration; swaps are undertaken to improve yield without sacrificing quality and tradeability.

Robert L. Rust is chief investment officer; William J. Kearney III is client contact.

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"Productive meeting... what are you thinking?"
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"Let's rerun the numbers to test several alternatives."
"What about relocating the lead tenant? We have a couple of good options for them."
"So you're thinking of renovating and re-leasing the property for an upscale use?"
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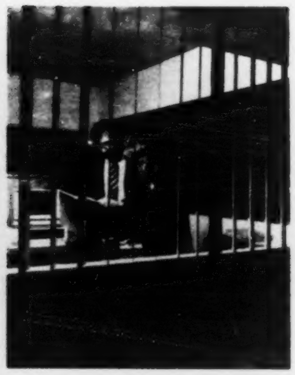

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Hill Samuel/Investment Advisers Ltd.

1100 Dain Tower, Box 357, Minneapolis, Minn. 55440; (612) 371-7638

Total assets managed	$932,000,000
Total discretionary assets	$932,000,000
Discretionary tax-exempt	$932,000,000
International equity assets	$903,000,000
International fixed-income assets	$29,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	28
Minimum separate account	$15,000,000
No. of portfolio managers	25
Size of research staff	18

Hill Samuel/Investment Advisers Ltd. is an active domestic and international equity and fixed-income manager.

The firm has a quantified approach to value investing. A consistent methodology is used in analyzing all world markets, securities and currencies. Options and financial futures are used.

David Tilles is chief investment officer; Anne Holloran is client contact.

Hodges Capital Management

755 West End Ave., New York, N.Y. 10025; (212) 866-5334

Total assets managed	$28,000,000
Total discretionary assets	$28,000,000
Discretionary tax-exempt	$24,000,000
401(k)/457 assets managed	$1,000,000
Types of accounts managed	CE
Tax-exempt clients	3
Minimum separate account	$2,000,000
No. of portfolio managers	1

Hodges Capital Management Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach is value-oriented, promising low multiple stocks. In fixed income, the firm uses a passive approach with staggered maturities up to three years.

Fletcher Hodges III is chief investment officer and client contact.

Hodgson Roberton Laing

390 Bay St., Suite 1608, Toronto, Ontario M5H 2Y2; (416) 869-3320

Total assets managed	$1,552,000,000
Total discretionary assets	$1,552,000,000
Discretionary tax-exempt	$391,000,000
For subsidiaries of U.S. firms	$109,000,000
Dedicated/immunized assets	$109,000,000
Tax-exempt clients	25
U.S. subsidiaries	1
Types of accounts managed	CEFG
Minimum separate account	$5,000,000
No. of portfolio managers	5
Size of research staff	2

Hodgson Roberton Laing Ltd., a Canadian firm, is an active equity, active and passive fixed-income, balanced, tactical asset allocation and short-term manager.

In equities, the firm is a value investor, employing a contrarian, opportunistic approach. Sector rotation is used, managing concentrated portfolios. Low p/e stocks and Graham & Dodd analysis are used.

In fixed-income, primary emphasis is on interest rate anticipation. The credit composition is structured to take advantage of pricing anomalies. Sector analysis is also used.

J. Warren Laing is chief investment officer; Wayne D. Beazer, is client contact.

Hoisington Investment Management Co.

950 Echo Lane, Suite 210, Houston, Texas 77024; (713) 467-7900

Total assets managed	$1,040,000,000
Total discretionary assets	$1,040,000,000
Discretionary tax-exempt	$1,040,000,000
Types of accounts managed	CF
Tax-exempt clients	27
Minimum separate account	$10,000,000
No. of portfolio managers	1

Hoisington Investment Management Co., an active fixed-income manager, uses a risk-averse, market-timing approach. Very short maturities are used during periods of high risk, while 30-year maturities capitalize on low-risk periods.

Van R. Hoisington is chief investment officer; Janice Teague Green is client contact.

Home Capital Services Inc.

59 Maiden Lane, 21st Floor, New York, N.Y. 10038; (212) 530-6240

Total assets managed	$5,303,000,000
Total discretionary assets	$5,303,000,000
Discretionary tax-exempt	$77,000,000
Types of accounts managed	CEF
Tax-exempt clients	6
Minimum separate account	$10,000,000
No. of portfolio managers	12
Size of research staff	2

Home Capital Services Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach is growth stock oriented, using quantitative growth valuation with analyst earnings revision analysis. Portfolio are identical, equally weighted and fully invested.

In fixed income, a quantitative approach to sector analysis is used, integrating option-adjusted spread analysis. Fixed-income futures are used.

Hiram F. Moody is chief investment officer; Erich G. Weissenberger Jr. is client contact.

Home Life Insurance Co.

75 Wall St., New York, N.Y. 10005; (212) 428-2000

Total assets managed	$4,291,000,000
Total discretionary assets	$4,291,000,000
Discretionary tax-exempt	$2,129,000,000
Pooled accounts	$60,000,000
GICs	$1,448,000,000
Annuities	$41,000,000
Other	$580,000,000
Tax-exempt clients:	
Pooled	50
Types of accounts managed	CEFGU
No. of portfolio managers	5
Size of research staff	25

Home Life Insurance Co. is an active equity, passive fixed-income, balanced and short-term cash manager.

Its fixed-income approach uses a seven-year laddered portfolio with emphasis on preservation of principal.

John Fabian is chief investment officer; John Hannan is client contact.

Horgan Tattersall Investment Counsel Ltd.

Suite 1904, P.O. Box 95, 20 Queen St. W., Toronto, Ontario M5H 3R3; (416) 979-1818

Total assets managed	$80,000,000
Total discretionary assets	$80,000,000
Discretionary tax-exempt	$50,000,000
Tax-exempt clients	4
Types of accounts managed	C
Minimum separate account	$5,000,000
No. of portfolio managers	2

Horgan Tattersall Investment Counsel Ltd., a Canadian firm, is an active small-cap and international/global active manager.

Its equity approach is value-oriented; Canadian tax-exempt portfolios concentrate on small-cap stocks.

Robert Tattersall is chief investment officer; Richard D.W. Howson is client contact.

Horsley Keogh Associates

505 Montgomery St., San Francisco, Calif. 94111; (415) 986-7733

Total assets managed	$550,000,000
Total discretionary assets	$550,000,000
Discretionary tax-exempt	$500,000,000
Types of accounts managed	CEG
Tax-exempt clients	15
Minimum separate account	$10,000,000
No. of portfolio managers	5
Size of research staff	5

Horsley Keogh Associates Inc. is a venture capital investment manager.

The firm selects venture capital partnerships that have prospects for exceptional investment returns and manages the sale of publicly traded securities distributed by these partnerships.

Phillip Horsley is chief investment officer; G.C. Belden Jr. is client contact.

Hotchkis and Wiley

800 W. Sixth St., Suite 540, Los Angeles, Calif. 90017; (213) 623-4073

Total assets managed	$3,882,000,000
Total discretionary assets	$3,882,000,000
Discretionary tax-exempt	$3,556,000,000
Types of accounts managed	CEFG
Tax-exempt clients	35
Minimum separate account	$25,000,000
No. of portfolio managers	4
Size of research staff	2

Hotchkis and Wiley is an active equity, balanced and tactical asset allocation manager.

Its equity approach uses Graham & Dodd analysis and emphasizes preservation of capital and the power of dividend return compounded.

John Hotchkis and George Wiley are chief investment officers; George Rebhan is client contact.

Hourglass Capital Management Inc.

400 N. St. Paul, Suite 840, Dallas, Texas 75201; (214) 754-8750

Total assets managed	$0
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	2

Hourglass Capital Management Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach emphasizes growth stocks, integrating top-down and bottom-up approaches. In fixed income, it uses a laddered maturity approach with an emphasis on high-quality intermediate maturity bonds.

Hilton Hemphill is chief investment officer; Steven Gold is client contact.

HT Investors Inc.

321 S. Main St., Providence, R.I. 02908; (401) 276-6125

Total assets managed	$564,000,000
Total discretionary assets	$475,000,000
Discretionary tax-exempt	$475,000,000
401(k)/457 assets managed	$5,000,000
Types of accounts managed	CEFG
Tax-exempt clients	140
Minimum separate account	$500,000
No. of portfolio managers	5

HT Investors Inc. is an active equity and active and passive fixed-income manager.

The firm uses an equity screening model that has a value orientation. It buys undervalued stocks of fundamentally sound companies when they are out of favor.

In fixed income, it uses a core defensive investment strategy designed to preserve capital and produce excess returns over the benchmark. This is accomplished through the selection of high-quality securities and maturity allocation strategies.

William M. Sloane Jr. is chief investment officer; Edward F. O'Donnell is client contact.

Wayne Hummer Management Co.

175 W. Jackson Blvd., Chicago, Ill. 60604; (312) 431-1700

Total assets managed	$262,000,000
Total discretionary assets	$230,000,000
Discretionary tax-exempt	$20,000,000
Types of accounts managed	CEF
Tax-exempt clients	5
Minimum separate account	$250,000
No. of portfolio managers	3

Wayne Hummer Management Co. is an active and passive equity, passive fixed-income, balanced and short-term manager.

Its value-oriented, bottom-up equity approach emphasizes growth and low p/e stocks. In fixed-income, it uses interest rate anticipation and an investment-grade, ladder-of-maturities approach.

Alan Bird is chief investment officer; Katherine Burkowski is client contact.

Huntington Trust Co.

Huntington Center, HC1131, Columbus, Ohio 43287; (614) 463-5345

Total assets managed	$1,800,000,000
Total discretionary assets	$1,650,000,000
Discretionary tax-exempt	$600,000,000
Pooled accounts	$150,000,000
Separate accounts	$450,000,000
Tax-exempt clients:	
Commingled	1,200
Separate	600
Types of accounts managed	CEFGU
Minimum separate account	$1,000,000
No. of portfolio managers	10

The Huntington Trust Co. is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach emphasizes dividend growth. Its fixed-income approach uses sector analysis.

James Buskirk is chief investment officer; Karen Barrett is client contact.

Hutson Management Co.

477 Madison Ave. 14th Floor, New York, N.Y. 10022; (212) 832-8540

Total assets managed	$228,000,000
Total discretionary assets	$228,000,000
Discretionary tax-exempt	$228,000,000
Types of accounts managed	CG
Tax-exempt clients	4
Minimum separate account	$25,000,000
No. of portfolio managers	2
Size of research staff	3

Hutson Management Co., an active equity manager, predicates its investment philosophy on a disciplined quantitative approach to equity selection. Stocks must satisfy specific criteria for earnings growth.

Heinz Hutzler is chief investment officer; Lew Sonn is client contact.

Hyperion Capital Management Inc.

520 Madison Ave., New York, N.Y. 10022; (212) 980-8400

Total assets managed	$864,000,000
Total discretionary assets	$864,000,000
Discretionary tax-exempt	$100,000,000
Types of accounts managed	C
Tax-exempt clients	3
Minimum separate account	$10,000,000
No. of portfolio managers	3
Size of research staff	2

Hyperion Capital Management Inc. is an active fixed-income manager. The firm manages mortgage-backed securities determined by proprietary prepayment analysis.

The parent is Hyperion Holdings Inc.

Christopher J. LaCroix is chief investment officer; Sarah M. Brown is client contact.

IAA Trust Co.

1701 Towanda Ave., Bloomington, Ill. 61701; (309) 557-3222

Total assets managed	$3,271,000,000
Discretionary tax-exempt	$200,000,000
Pooled accounts	$99,000,000
Separate accounts	$101,000,000
International equity assets	$500,000
International fixed-income assets	$500,000
Tax-exempt clients:	
Commingled	1,628
Separate	163
Types of accounts managed	CF
Minimum separate account	$200,000
No. of portfolio managers	10

IAA Trust Co. is an active equity, active and passive fixed-income, balanced, active international equity and fixed-income and short-term manager.

Its value-oriented growth equity portfolio emphasizes smaller-cap stocks selling at a reasonable p/e ratio and sector rotation. Its primary fixed-income approach is to anticipate changes in the yield curve, with incremental return enhanced through interest rate anticipation.

Gary E. Mede is chief investment officer; Len Davenport is client contact.

IBJ Schroder Bank & Trust

1 State St., New York, N.Y. 10004;
(212) 858-2395

Total assets managed	$1,009,000,000
Total discretionary assets	$1,009,000,000
Discretionary tax-exempt	$150,000,000
Pooled accounts	$50,000,000
Separate accounts	$100,000,000
401(k)/457 assets managed	$20,000,000
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	6
Size of research staff	5

IBJ Schroder Bank & Trust is an active equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

Its equity approach emphasizes sector rotation, market timing/tactical asset allocation and Graham & Dodd principles. Options are used.

Its fixed-income approach is based on interest rate anticipation and sector analysis.

Charles Porten is chief investment officer and client contact.

ICM Asset Management Inc.

W. 601 Main Ave., Suite 1017,
Spokane, Wash. 99201; (509)
455-3588

Total assets managed	$91,000,000
Total discretionary assets	$91,000,000
Discretionary tax-exempt	$70,000,000
Types of accounts managed	CEFU
Tax-exempt clients	55
Minimum separate account	$100,000
No. of portfolio managers	3
Size of research staff	2

ICM Asset Management Inc. is an active equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

Its equity approach places emphasis on the selection of companies with good unit growth potential or undervalued stocks and market sectors.

Its fixed-income approach emphasizes quality and maturity weighting with low turnover.

James M. Simmons is chief investment officer; Roland A. Hernges and Steve Neff are client contact.

IDC Portfolio Management

300 Cotttonwood Ave., Hartland, Wis.
53029; (414) 367-6868

Total assets managed	$395,000,000
Total discretionary assets	$280,000,000
Discretionary tax-exempt	$89,000,000
Types of accounts managed	CG
Tax-exempt clients	3
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	2

IDC Portfolio Management Inc. is an active equity and active fixed-income manager.

Its equity approach is to actively managed a high dividend yield utility common stock portfolio of large-cap, high-quality utilities with safe, secure income streams. Options are used.

Its fixed-income approach allocates assets between bonds and cash, depending on interest rate forecasts.

John F. Rickmaier is chief investment officer; Mickey Miller is client contact.

IDS Equity Advisors/IDS Fixed-Income Advisors

IDS Tower 10, Minneapolis, Minn.
55440; (612) 372-1335

Total assets managed	$5,817,000,000
Total discretionary assets	$5,528,000,000
Discretionary tax-exempt	$4,264,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	49
Minimum separate account	$10,000,000
No. of portfolio managers	8
Size of research staff	33

IDS Equity Advisors/IDS Fixed-Income Advisors is an active equity, active fixed-income and balanced manager.

Its equity approach is to manage large-cap blue-chip portfolios using a top-down sector rotational approach. Options and stock index futures are used with client approval.

The fixed-income approach uses interest rate anticipation in its top-down, sector rotational approach.

Peter J. Anderson is chief investment officer; Diane K. Vener is client contact.

IDS Financial Services

IDS Tower 10, Minneapolis, Minn.
55440; (612) 372-3131

Total assets managed	$70,000,000
Total discretionary assets	$70,000,000
Discretionary tax-exempt	$6,000,000
Types of accounts managed	CEF
Tax-exempt clients	42
Minimum separate account	$75,000
No. of portfolio managers	5
Size of research staff	33

IDS Financial Services is an active equity, active fixed-income and balanced manager.

In equities, the firm is a stock picker; in fixed-income, it positions accounts to benefit from the yield curve and possible changes in interest rates.

William Dudley is chief investment officer; John Karl is client contact.

IDS Growth Spectrum Advisors

IDS Tower 10, Minneapolis, Minn.
55440; (612) 372-1335

Total assets managed	$336,000,000
Total discretionary assets	$317,000,000
Discretionary tax-exempt	$156,000,000
Types of accounts managed	CG
Tax-exempt clients	2
Minimum separate account	$10,000,000
No. of portfolio managers	3
Size of research staff	33

IDS Growth Spectrum Advisors, an active equity manager, manages emerging growth and core growth portfolios using a top-down (growth trend analysis) and bottom-up (fundamental and valuation analysis) approach.

Gordon M. Fines is chief investment officer; Diane K. Vener is client contact.

IDS International Inc.

IDS Tower 10, Minneapolis, Minn.
55440; (612) 372-1335

Total assets managed	$1,270,000,000
Total discretionary assets	$1,190,000,000
Discretionary tax-exempt	$592,000,000
International equity assets	$571,000,000
International cash assets	$21,000,000
Types of accounts managed	C
Tax-exempt clients	10
Minimum separate account	$15,000,000
No. of portfolio managers	4
Size of research staff	35

IDS International Inc. offers semipassive and active international/global equity management.

The firm actively manages international and global portfolios using a top-down and bottom-up approach. Semipassive portfolios combine an active top-down approach for country allocation and computer optimized stock selection.

Peter L. Lamaison is chief investment officer; Diane K. Vener is client contact.

IDS Trust

2880 Multifoods Tower, Minneapolis,
Minn. 55402; (612) 372-3742

Total assets managed	$2,202,000,000
Total discretionary assets	$2,202,000,000
Discretionary tax-exempt	$2,202,000,000
401(k)/457 assets managed	$2,202,000,000
International equity assets	$68,000,000
Types of accounts managed	C
Tax-exempt clients	234
Minimum separate account	$10,000,000
No. of portfolio managers	22
Size of research staff	33

IDS Trust is an active and passive equity, active fixed-income, balanced, active international/global equity, short-term and GIC manager.

GIC management is handled in-house by IDS Trust; all other categories are managed by other divisions on IDS Trust's behalf.

Peter Anderson is chief investment officer; Ward Armstrong is client contact.

IFP Inc.

2001 Bryan Tower, Suite 1360, Dallas,
Texas 75201; (214) 754-0333

Total assets managed	$30,000,000
Discretionary tax-exempt	$25,000,000
Equity real estate	$2,000,000
Types of accounts managed	C
Tax-exempt clients	30
Minimum separate account	$100,000
No. of portfolio managers	3
Size of research staff	2

IFP Inc. is an equity, active fixed-income, balanced and real estate manager.

Its equity approach focuses on quantitative values. Options are used.

In real estate, undervalued properties with superior upside potential and current cash flow are sought.

T. Tim Cullum and Richard L. Sandow are chief investment officers; Steven L. Burks is client contact.

Income Research & Management Inc.

155 Federal St., Fourth Floor, Boston,
Mass. 02110; (617) 350-7725

Total assets managed	$249,000,000
Total discretionary assets	$246,000,000
Discretionary tax-exempt	$246,000,000
Dedicated/immunized assets	$14,000,000
Types of accounts managed	CG
Tax-exempt clients	8
Minimum separate account	$5,000,000
No. of portfolio managers	2

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: Government
U: Union

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Income Research & Management Inc. is an active and passive fixed-income manager.

Its approach is to actively manage portfolios in the less efficient sectors, primarily investment-grade corporate bonds. Undervalued sectors and securities with special features are sought.

John A. Sommers is chief investment officer; Robert G. Segee is client contact.

Independence Investment Associates Inc.

1 Liberty Square, Boston, Mass.
02109; (617) 292-8700

Total assets managed	$4,858,000,000
Total discretionary assets	$4,858,000,000
Discretionary tax-exempt	$3,779,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	59
Minimum separate account	$10,000,000
No. of portfolio managers	7
Size of research staff	9

Independence Investment Associates Inc. is an active equity, active fixed-income and balanced manager.

In equities, it finds attractive any stock that combines cheapness and improving fundamentals. Its process is quantitative and based on in-house proprietary research. Portfolio construction is optimized.

Its fixed-income approach is to actively manage duration and spreads in investment grade bonds to produce superior results. The process is disciplined and model driven.

William C. Fletcher is chief investment officer; Mark C. Lapman is client contact.

Indiana Investment Advisors

1 Indiana Square, Suite 101,
Indianapolis, Ind. 46266; (317)
266-6198

Total assets managed	$5,137,000,000
Total discretionary assets	$3,768,000,000
Discretionary tax-exempt	$1,950,000,000
401(k)/457 assets managed	$230,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	1,032
Minimum separate account	$1,000,000
No. of portfolio managers	8
Size of research staff	2

Indiana Investment Advisors is an active equity, active fixed-income, balanced, tactical asset allocation, short-term and GIC manager.

Its equity approach focuses on high-quality, high-growth stocks with prospects for continued growth and above average current earnings momentum.

Its fixed-income approach buys high-quality intermediate-term government and corporate bonds with attractive relative values. Duration is actively managed to anticipate interest changes.

P. Roger Kumler is chief investment officer; Charles E. Pike is client contact.

Wm. A. Inskeep & Co.

12697 New Brittany Blvd., Fort Myers,
Fla. 33907; (813) 939-5161

Total assets managed	$22,000,000
Total discretionary assets	$20,000,000
Discretionary tax-exempt	$11,000,000
Types of accounts managed	C
Tax-exempt clients	18
Minimum separate account	$300,000
No. of portfolio managers	2

Wm. A. Inskeep & Co. is an active equity, active fixed-income and balanced manager.

Its equity approach uses growth stocks and Graham & Dodd analysis. The approach is fundamental, seeking issues with strong long-term potential. Market timing is used.

Its fixed-income approach is risk-averse, using only high-quality, short-to intermediate-term issues.

William A. Inskeep is chief investment officer; Edrick C. Flewelling is client contact.

Institutional Capital Corp.

303 W. Madison St., Suite 1800,
Chicago, Ill. 60606; (312) 641-7200

Total assets managed	$1,217,000,000
Total discretionary assets	$1,217,000,000
Discretionary tax-exempt	$1,217,000,000
401(k)/457 assets managed	$38,000,000
Types of accounts managed	CEFU
Tax-exempt clients	15
Minimum separate account	$25,000,000
No. of portfolio managers	5
Size of research staff	6

Institutional Capital Corp. is an active equity and balanced manager.

Its equity approach emphasizes sector rotation and market timing. Its fixed-income approach uses interest rate anticipation.

William Maloney is chief investment officer; Russell C. Walter is client contact.

Institutional Mortgage Investors Management

220 E. 42nd St., New York, N.Y.
10017; (212) 972-9648

Total assets managed	$650,000,000
Total discretionary assets	$0
Discretionary tax-exempt	$0
No. of portfolio managers	2

Institutional Mortgage Investment Management is a mortgage manager.

It seeks to provide a high, risk-adjusted rate of return for passive mortgage investors through bypassing securitization.

Martin B. Boorstein is chief investment officer and client contact.

Institutional Portfolio Services Ltd.

1 First National Plaza, Suite 2594,
Chicago, Ill. 60603; (312) 236-5388

Total assets managed	$100,000,000
Total discretionary assets	$100,000,000
Discretionary tax-exempt	$100,000,000
Types of accounts managed	CEF
Tax-exempt clients	40
Minimum separate account	$250,000
No. of portfolio managers	2

Institutional Portfolio Services Ltd. is an active equity, active fixed-income and balanced manager.

Its equity approach is top-down, giving prominent weight to monetary policy, interest rates and the stage of the economic cycle. Options are used.

Its fixed-income approach involves interest rate anticipation and the analysis of monetary aggregates, currency exchange rates and the stage of the economic cycle.

B.P. Pai is chief investment officer; Denise M. Iwaniec is client contact.

INTECH

20 Prudential Plaza, Newark, N.J.
07102; (201) 802-9396

Total assets managed	$1,460,000,000
Total discretionary assets	$1,460,000,000
Discretionary tax-exempt	$1,321,000,000
International equity assets	$294,000,000
Equity indexed assets	$1,027,000,000
Types of accounts managed	CU
Tax-exempt clients	43
Minimum separate account	$75,000,000
No. of portfolio managers	3

INTECH is an active equity and passive equity and passive international equity manager.

The firm is a quantitative manager of index funds and enhanced index funds of domestic and foreign common stocks.

John R. Zumbrunn is chief investment officer; David E. Hurley is client contact.

Integra Financial Corp. — Trust Group

Fourth Avenue and Wood Street,
Pittsburgh, Pa. 15278-3003; (412)
644-8477

Total assets managed	$5,700,000,000
Total discretionary assets	$4,000,000,000
Discretionary tax-exempt	$1,100,000,000
Equity real estate assets	$4,000,000
International equity assets	$13,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	750
Minimum separate account	$1,000,000
No. of portfolio managers	9
Size of research staff	6

Integra Financial Corp.-Trust Group is an active equity, active fixed-income, balanced, active international equity and short-term manager.

Its equity approach uses sector analysis followed by comprehensive equity value screening and fundamental analysis. Its fixed-income approach incorporates elements of interest rate anticipation and horizon analysis with some sector shifts.

Douglas W. Sherratt is chief investment officer and client contact.

InterCash Advisors Inc.

300 S. Grand Ave., Suite 2200, Los
Angeles, Calif. 90071; (213)
229-1184

See entry for SECURITY PACIFIC INVESTMENT GROUP.

Interfid Capital Corp.

1 Dag Hammarskjold Plaza, New
York, N.Y., 10017; (212) 888-6808

Total assets managed	$70,000,000
Total discretionary assets	$70,000,000
Discretionary tax-exempt	$66,000,000
Types of accounts managed	C
Tax-exempt clients	5
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	2

Interfid Capital Corp. is an active equity, active and passive fixed-income and balanced manager.

Its equity approach is fundamentalist and quantitative, identifying currently undervalued stocks that will produce appreciation and improved income stream. Its primary fixed-income approach is passive, using interest rate anticipation.

Amos Kaminski is chief investment officer; H.H. Updike is client contact.

Interinvest Corp.

84 State St., Sixth Floor, Boston,
Mass. 02109; (617) 723-7870

Total assets managed	$100,000,000
Total discretionary assets	$100,000,000
Discretionary tax-exempt	$50,000,000
International equity assets	$35,000,000
International fixed income assets	$10,000,000
Types of accounts managed	CEFU
Tax-exempt clients	75
Minimum separate account	$500,000
No. of portfolio managers	6
Size of research staff	4

Interinvest Corp. is an active equity, active fixed-income, balanced, active international equity and fixed-income, and short-term manager.

In equities, managers determine market timing, country allocation and sector allocation using a global top-down approach and Graham & Dodd analysis. Its fixed-income approach is based on interest rate assessments.

Hans P. Black is chief investment officer; Stanley T. Schmidt is client contact.

The International Trust Co.

Box 75, Royal Bank Plaza, North
Tower, 14th Floor, Toronto, Ontario
M5J 2J2; (416) 865-0515

Total assets managed	$306,000,000
Total discretionary assets	$306,000,000
Discretionary tax-exempt	$306,000,000
For subsidiaries of U.S. firms	$40,000,000
Tax-exempt clients	37
U.S. subsidiaries	15
Types of accounts managed	CF

The International Trust Co., a Canadian firm, is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is value-oriented, using low p/e, sector rotation and market timing. Its fixed-income approach is based on interest rate anticipation, sector analysis and duration management.

Mohammed Mamoodallah is chief investment officer; Jack Freeman is client contact.

Interstate Asset Management Inc.

2600 NCNB Plaza, Charlotte, N.C.
28280; (704) 379-9097

Total assets managed	$45,000,000
Total discretionary assets	$45,000,000
Discretionary tax-exempt	$14,000,000
401(k)/457 assets managed	$8,000,000
Types of accounts managed	CEF
Tax-exempt clients	24
No. of portfolio managers	2

Interstate Asset Management Inc. is an active equity, active fixed-income and balanced manager.

Its bottom-up equity approach emphasizes value and long-term results independent of current behavior. Its fixed-income approach uses interest rate anticipation. Duration is based on expected interest rate movements.

James T. Moorhead is chief investment officer; Giles C. Baker is client contact.

Inverness Counsel Inc.

545 Madison Ave., New York, N.Y.
10022; (212) 980-5230

Total assets managed	$955,000,000
Discretionary tax-exempt	$350,000,000
Types of accounts managed	CEF
Tax-exempt clients	33
Minimum separate account	$1,000,000
No. of portfolio managers	11

Inverness Counsel Inc. is an active equity, passive fixed-income and balanced manager.

Its equity approach uses qualitative, top-down economic analysis modified by quantitative price momentum/fundamental cross-plotted computer screens to develop its stock universe and industry weightings. Its fixed-income approach uses spaced maturities with selection focusing on the yield curve inflection point.

George H. Garfield is chief investment officer and client contact.

INVESCO Capital Management

1315 Peachtree St., Suite 300,
Atlanta, Ga. 30309; (404) 892-0875

Total assets managed	$16,900,000,000
Discretionary tax-exempt	$12,900,000,000
401(k)/457 assets managed	$75,000,000
Dedicated/immunized assets	$70,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	168
Minimum separate account	$10,000,000
No. of portfolio managers	21

INVESCO Capital Management is an active equity and fixed-income; domestic and global balanced; active international equity and fixed-income; tactical asset allocation; and short-term manager.

Its equity approach is fundamental and bottom-up, placing primary emphasis on issue selection while de-emphasizing economic analysis and forecasting. Its fixed-income approach actively ascertains the optimum duration through analysis of real yields, the yield curve and translating that duration into its corresponding maturity in a given interest rate environment.

Wendell M. Starke is chief investment officer; Willis M. Everett is client contact.

INVESCO MIM International

Manhattan Tower, 101 E. 52nd St.,
New York, N.Y. 10022; (212)
888-5820

Total assets managed	$646,000,000
Total discretionary assets	$546,000,000
Discretionary tax-exempt	$353,000,000
International equity assets	$179,000,000
International fixed-income assets	$40,000,000
Types of accounts managed	CEFG
Tax-exempt clients	9
Minimum separate account	$10,000,000

INVESCO MIM International is an active equity and fixed-income; short-term; and active international equity, fixed-income and balanced manager.

Its equity approach uses sector rotation and low p/e stocks. In fixed income, it focuses on high-quality duration. Both approaches include the belief that common factors determine the level of markets worldwide but security valuation systems differ.

Canadian investment managers

Firm	$ mils.*
Jarislowsky, Fraser	7,800
Sceptre Investment	6,908
Gryphon Investment	5,977
AMI Asset	4,814
Mu-Cana Investment	4,373
Confed Investment	3,814
Corporate Investment	3,614
Phillips Hager & North	3,500
Knight, Bain, Seath	2,837
BGH Central	2,330
E.J. McConnell	2,200
Sun Life of Canada	2,196
CT Investment	1,959
MT Associates	1,808
Lincluden Mgmt.	1,700
Nat'l Trust	1,677
Morguard Investments	1,600
Laurentian Investment	1,376
Montrusco & Associates	1,362
Bolton Tremblay	1,203
ManuVest	1,024
Elliott & Page Investment	850
Trafalgar Capital	765
Laketon Investment	750
Guardian Capital	587
Canagex Investments	464
Aetna Capital	420
Prudential Assurance	420
Hodgson Roberton Laing	390
Leith Wheeler	354
Investors Group Trust	328
Managed Investments	320
Foyston, Gordon & Payne	312
Kingwest	310
Int'l Trust	306
Batterymarch: Canada	300
Pembroke Mgmt.	300
Penreal Advisors	256
La Sauvegarde	226
Elliott & Page Atlantic	203
Edgecombe Group	154
Horgan Tattersall	50
Guardian Timing Services	10
Fleming Canada	0
Grosvenor Int'l	0
Metropolitan Trust-Canada	0
Total	**72,147**

*Discretionary, tax-exempt assets in U.S. dollars

Investment Advisers Inc.

1100 Dain Tower, Minneapolis, Minn.
55402; (612) 371-2939

Total assets managed	$8,500,000,000
Total discretionary assets	$8,500,000,000
Discretionary tax-exempt	$7,100,000,000
International equity assets	$875,000,000
International fixed income assets	$75,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	200
Minimum separate account	$10,000,000
No. of portfolio managers	10
Size of research staff	15

Investment Advisers Inc. is an active equity, active and passive fixed-income, balanced, active international equity and fixed-income, short-term and venture capital manager.

The firm has three major equity products: theme rotation (core); small cap; and growth equity.

Its fixed-income approach uses credit cycle analysis, which drives maturity and duration decisions. The firm uses active and moderate duration strategies and has a cash management product.

Noel Rahn is chief investment officer; I.P. "Kip" Kneiman is client contact.

Investment Advisors Inc.

1100 Louisiana, Suite 2600, Houston,
Texas 77002; (713) 659-2611

Total assets managed	$855,000,000
Total discretionary assets	$800,000,000
Discretionary tax-exempt	$616,000,000
401(k)/457 assets managed	$20,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	49
Minimum separate account	$1,000,000
No. of portfolio managers	7

Investment Advisors Inc. is an active equity, active fixed-income and balanced manager.

Its top-down equity approach combines sector rotation with an emphasis on growth stocks.

Its fixed-income approach uses interest rate anticipation, sector analysis and duration management based on yield curve and macroeconomic analysis. Portfolios are restricted to investment-grade securities.

Marvin H. McMurrey Jr. is chief investment officer; William L. Price is client contact.

The Investment Counsel Co.

56 E. Pine St., Suite 200, Orlando, Fla.
32801; (407) 841-6241

Total assets managed	$389,000,000
Total discretionary assets	$389,000,000
Discretionary tax-exempt	$361,000,000
401(k)/457 assets managed	$10,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	111
Minimum separate account	$100,000
No. of portfolio managers	3
Size of research staff	1

The Investment Counsel Co. is an active equity, active fixed-income and short-term manager.

Its equity approach is bottom-up and value-oriented, holding only companies it knows well and buying only at the price it wants.

Its fixed-income approach is based on interest rate anticipation, managing portfolios to provide stability through moderate maturity shifts and the use of high-quality issues.

Fred J. Shockley is chief investment officer; Grant McMurry is client contact.

Investment Counselors Inc.

1010 Market St., Suite 1540, St. Louis,
Mo. 63101; (314) 421-3080

Total assets managed	$187,000,000
Total discretionary assets	$187,000,000
Discretionary tax-exempt	$129,000,000
401(k)/457 assets managed	$2,000,000
Types of accounts managed	CFGU
Tax-exempt clients	19
Minimum separate account	$500,000
No. of portfolio managers	3

Investment Counselors Inc. is an active equity, passive fixed-income and balanced manager.

Its equity approach focuses on companies with increasing cash flows selling at a discount. Its fixed-income investments are in high-quality, intermediate securities with relatively current coupons. Average maturity is seven to 10 years.

Mark J. Deschaine is chief investment officer and client contact.

Investment Counselors of Maryland

803 Cathedral St., Baltimore, Md.
21201; (301) 539-3838

Total assets managed	$3,141,000,000
Total discretionary assets	$3,141,000,000
Discretionary tax-exempt	$2,689,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	118
Minimum separate account	$15,000,000
No. of portfolio managers	7
Size of research staff	3

Investment Counselors of Maryland is an active equity, active fixed-income, balanced, short-term and small-cap, low p/e mutual fund manager.

Its equity approach emphasizes low p/e stocks and Graham & Dodd analysis. Its fixed-income approach uses interest rate anticipation and sector analysis.

Craig Lewis is chief investment officer; Robert B. Russell II is client contact.

Investment Management Inc.

4870 S. Lewis, Suite 180, Tulsa, Okla.
74105-5172; (918) 742-3031

Total assets managed	$23,000,000
Discretionary tax-exempt	$5,000,000
Types of accounts managed	C
Tax-exempt clients	18
Minimum separate account	$200,000
No. of portfolio managers	2

Investment Management Inc. is a passive equity, passive fixed-income, balanced and no-load mutual funds manager.

Its equity approach is based on sector rotation and market timing; its fixed-income approach, on interest rate anticipation.

Donald J. Rubottom is chief investment officer and client contact.

Investment Management Services

777 E. Wisconsin Ave., Suite 3400,
Milwaukee, Wis. 53202; (414)
765-3562

Total assets managed	$501,000,000
Total discretionary assets	$501,000,000
Discretionary tax-exempt	$267,000,000
401(k)/457 assets managed	$30,000,000
Types of accounts managed	CEF
Tax-exempt clients	62
Minimum separate account	$3,000,000
No. of portfolio managers	7
Size of research staff	2

Investment Management Services is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach focuses on quality growth stocks. Its fixed-income approach is dependent on sector analysis for investment selection. Interest rate anticipation is used.

Robinson Bosworth III is chief investment officer and client contact.

Investment Research Co.

111 W. Jackson Blvd., Suite 1700,
Chicago, Ill. 60604; (312) 930-3944

Total assets managed	$580,000,000
Total discretionary assets	$580,000,000
Discretionary tax-exempt	$580,000,000
Types of accounts managed	C
Tax-exempt clients	7
Minimum separate account	$30,000,000
No. of portfolio managers	1
Size of research staff	2

Investment Research Co. is an active equity manager.

Its equity approach is quantitative. With the use of high-order non-linear analysis, its maximum growth strategy is able to detect covariance interactions and subtle patterns undetectable by mean variance mathematics. Stock index futures are used.

F.J. Gould is chief investment officer and client contact.

Investors Group Trust Co.

447 Portage Ave., Winnipeg, Manitoba
R3C 3B6; (204) 943-0361

Total assets managed	$328,000,000
Total discretionary assets	$328,000,000
Discretionary tax-exempt	$328,000,000
Mortgage assets	$132,000,000
Tax-exempt clients	1,888
Types of accounts managed	CEFGU
Minimum separate account	$21,600,000
No. of portfolio managers	9

Investors Group Trust Co. Ltd., a Canadian firm, is an active equity, active fixed-income and short-term manager.

Its equity approach uses a conservative selection process, emphasizing value and liquidity. Its fixed-income approach uses a high-quality bond portfolio with a pooled mortgage fund.

R.E. Archer is chief investment officer; R.G. Darling is client contact.

Investors Management Services Inc.

P.O. Box 3700, Birmingham, Mich.
48012; (313) 642-1020

Total assets managed	$225,000,000
Total discretionary assets	$225,000,000
Discretionary tax-exempt	$125,000,000
International equity assets	$3,000,000
Types of accounts managed	CEF
Tax-exempt clients	65
Minimum separate account	$100,000
No. of portfolio managers	2

Investors Management Services Inc. is an active equity and fixed-income, balanced, tactical asset allocation and active international equity manager.

Its equity approach uses low p/e stocks, combining sector rotation and market timing to capitalize on market inefficiencies.

Its fixed-income approach uses sector analysis, attempting to maximize returns by adjusting maturities based on interest rate forecasts.

Richard H. Wiggins is chief investment officer; Gerald DeHondt is client contact.

Investors Research Co.

P.O. Box 30, Santa Barbara, Calif.
93102; (805) 569-1078

Total assets managed	$102,000,000
Total discretionary assets	$102,000,000
Discretionary tax-exempt	$10,000,000
Types of accounts managed	CF
Tax-exempt clients	7
Minimum separate account	$250,000
No. of portfolio managers	4
Size of research staff	4

Investors Research Co. is an active equity and balanced manager.

Its equity approach focuses on growth and emerging growth stocks, employing sector rotation; the firm places emphasis on both fundamentals and technical characteristics. Its fixed-income approach is passive, using interest rate anticipation.

John R. Noble is chief investment officer; Ralph D. Gibson Jr. is client contact.

Investors Research Corp.

10 Gould Center, Suite 408, Rolling
Meadows, Ill. 60008; (708)
640-1511

Total assets managed	$7,329,000,000
Discretionary tax-exempt	$1,183,000,000
401(k)/457 assets managed	$513,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	43
Minimum separate account	$10,000,000
No. of portfolio managers	5
Size of research staff	9

Investors Research Corp., primarily an active equity manager, emphasizes growth and emerging growth stocks, employing a bottom-up approach. It follows a rigid sell discipline and remains fully invested.

James E. Stowers Jr., Dennis von Waaden, Robert Puff Jr., James E. Stowers III and Eric Fuchs are chief investment officers; Stephen M. Barney and John F. Rogers are client contacts.

Invista Capital Management

1500 Hub Tower, 699 Walnut, Des
Moines, Iowa 50309; (515)
247-7424

See entry for THE PRINCIPAL FINANCIAL GROUP.

Ivory & Sime International

39 Main St., Chatham, N.J. 07928;
(201) 635-6700

Total assets managed	$144,100,000
Total discretionary assets	$144,100,000
Discretionary tax-exempt	$144,100,000
International equity assets	$137,000,000
International cash assets	$7,100,000
Types of accounts managed	C
Tax-exempt clients	4
Minimum separate account	$10,000,000
No. of portfolio managers	33

Ivory & Sime International Inc. is an active international global equity manager.

Its equity approach emphasizes growth stocks, sector rotation and market timing, using long-term fundamentals in a research-based approach. Emphasis is on stock selection and identifying companies in a global context.

Richard Newbery is chief investment officer; Keith H. Wood is client contact.

J

Jacobs Levy Equity Management Inc.

Edgewater Commons Two, 81 Two
Bridges Road, Fairfield, N.J. 07004;
(201) 882-0066

Total assets managed	$30,000,000
Total discretionary assets	$30,000,000
Discretionary tax-exempt	$30,000,000
Types of accounts managed	G
Tax-exempt clients	1
Minimum separate account	$10,000,000
No. of portfolio managers	2
Size of research staff	1

Jacobs Levy Equity Management Inc., an active equity manager, follows a quantitatively driven stock rotation strategy using proprietary anomaly and sector models. Stock index futures are used.

Bruce I. Jacobs and Kenneth N. Levy are chief investment officers; Mr. Jacobs is client contact.

Jacques & Kurdziel Ltd.

110 E. 59th St., Suite 1102, New York,
N.Y. 10022; (212) 758-8778

Total assets managed	$400,000,000
Discretionary tax-exempt	$0

Jacques & Kurdziel Ltd. is a real estate manager for Dutch institutions. It seeks office buildings and regional malls, on an all-cash basis, with development or redevelopment potential.

W. Murray Jacques and Donald Kurdziel are client contacts.

James Investment Research

P.O. Box 8, Alpha, Ohio 45301; (513)
426-7640

Total assets managed	$580,000,000
Total discretionary assets	$530,000,000
Discretionary tax-exempt	$530,000,000
Types of accounts managed	CEFU
Tax-exempt clients	45
Minimum separate account	$5,000,000
No. of portfolio managers	5
Size of research staff	7

James Investment Research Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach uses growth and low p/e stocks with sector rotation, market timing and quantitative approaches. It seeks neglected stocks with excellent fundamentals. For fixed-income, only high-quality bonds are bought, with maturities based on interest rate forecasts.

F.E. James is chief investment officer; Diane M. Rose is client contact.

James River Capital Management Inc.

909 E. Main St., Suite 321, Richmond,
Va. 23219; (804) 782-8725

Total assets managed	$46,000,000
Total discretionary assets	$41,000,000
Discretionary tax-exempt	$27,000,000
401(k)/457 assets managed	$2,000,000
International equity assets	$1,000,000
Types of accounts managed	CE
Tax-exempt clients	26
Minimum separate account	$250,000
No. of portfolio managers	4
Size of research staff	1

James River Capital Management Inc. is an active equity, active fixed-income, balanced and tactical asset allocation manager.

The firm chooses stocks for value, ability to sustain growth, earnings consistency, strong cash flow generating capacity, dividend growth and low p/e.

Frederic S. Bocock is chief investment officer; Bradley H. Gunter is client contact.

Jamison, Eaton & Wood Inc.

39 Main St., Chatham, N.J. 07928;
(201) 635-6700

Total assets managed	$7,731,000,000
Total discretionary assets	$108,000,000
Discretionary tax-exempt	$55,000,000
Types of accounts managed	CEFU
Tax-exempt clients	23
Minimum separate account	$2,000,000
No. of portfolio managers	6

Jamison, Eaton & Wood Inc. is an active equity, active fixed-income and balanced manager.

In equities, both top-down asset mix decisions and bottom-up stock selection are employed. Sector rotation is pursued within these disciplines.

In fixed income, it applies risk reduction techniques to both the maturity and quality decisions, integrating top-down policy-making and bottom-up company analysis. Anticipated changes in interest rates and credit ratings are taken into account.

The firm is an adviser to an additional $7.5 billion in tax-exempt assets.

Keith H. Wood is chief investment officer and client contact.

Jarislowsky, Fraser & Co.

65 Queen St. W., Suite 1501, Toronto,
Ontario M5H 2M5; (416) 363-7417

Total assets managed	$9,200,000,000
Total discretionary assets	$9,200,000,000
Discretionary tax-exempt	$7,800,000,000
For subsidiaries of U.S. firms	$1,000,000,000
Non-North American bonds	$500,000,000
Tax-exempt clients	225
U.S. subsidiaries	35
Types of accounts managed	CEFGU
Minimum separate account	$7,000,000
No. of portfolio managers	10

Jarislowsky, Fraser & Co., a Canadian firm, is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is based on fundamental research using Graham & Dodd analysis. Emphasis is placed on value analysis, financial strength and management competence. Its fixed-income approach uses interest rate anticipation and sector analysis. It maximizes yield primarily by investing in quality corporate bonds. Three criteria are used — safety of principal, average term and yield optimization.

Stephen Jarislowsky is chief investment officer; Lorne T. Wickerson is client contact.

JCW Investments Inc.

3 Pointe Drive, Suite 212, Brea, Calif.
92621; (714) 529-4111

Total assets managed	$478,000,000
Total discretionary assets	$459,000,000
Discretionary tax-exempt	$459,000,000
Equity real estate	$5,000,000
Mortgage assets	$9,000,000
Types of accounts managed	EFG
Tax-exempt clients	3
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	3

JCW Investments Inc. is an active equity, active fixed-income and balanced fund manager.

The firm's value-oriented equity approach uses fundamental and quantitative analysis to generate a list of stocks to buy and hold. In fixed-income, the firm combines high-quality securities with risk-averse decision-making processes.

Bohdan J. Kekish is chief investment officer; Jennifer K. Weiner is client contact.

Jefferson National Bank

122 E. Grace St., Richmond, Va.
23219; (804) 782-6000

Total assets managed	$579,000,000
Total discretionary assets	$467,000,000
Discretionary tax-exempt	$69,200,000
Pooled accounts	$12,000,000
Separate accounts	$57,000,000
International equity assets	$3,000,000
Tax-exempt clients:	
Commingled	102
Separate	30
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	1

Jefferson National Bank is an active equity, active fixed-income, balanced, tactical asset allocation, active international equity and short-term manager.

Its equity approach uses top-down analysis of the economy followed by value-based stock selection.

Its fixed-income approach seeks maximum current income while protecting principal by buying only high-quality securities with short to intermediate maturities.

Rieman McNamara Jr. is chief investment officer; Donald J. Hoelting is client contact.

Jennison Associates Capital

466 Lexington Ave., New York, N.Y.
10017; (212) 421-1000

Total assets managed	$21,709,000,000
Total discretionary assets	$21,709,000,000
Discretionary tax-exempt	$21,709,000,000
Types of accounts managed	CEFG
Tax-exempt clients	74
Minimum separate equity account	$20,000,000
Minimum separate bond account	$50,000,000
No. of portfolio managers	8
Size of research staff	9

Jennison Associates Capital Corp. is an active equity, active and passive fixed-income and balanced manager.

Its primary equity approach focuses on growth stocks, investing in those demonstrating superior absolute and relative earnings growth and that are attractively valued.

In fixed income, it actively manages long-term, high-quality bonds and handles controlled accounts and dedicated and quantitatively structured accounts.

Spiros Segalas is chief investment officer; John H. Hobbs is client contact.

JMB Institutional Realty

900 N. Michigan Ave., Chicago, Ill.
60611-1585; (312) 915-1900

Total assets managed	$9,580,000,000
Total discretionary assets	$8,899,000,000
Discretionary tax-exempt	$8,639,000,000
Equity real estate	$8,639,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	271
Minimum separate account	$100,000,000
No. of portfolio managers	16
Size of research staff	29

JMB Institutional Realty, a real estate manager, makes equity and equity-oriented investments in diversified portfolios of larger retail, office, industrial and apartment properties using complementary investment structures to optimize returns and emphasizing intensive property management to add value.

Jerome J. Claeys III is chief investment officer; John S. Lillard is client contact.

JMC Capital Management

2 Lakeway Center, Suite 1400, 3850
N. Causeway Blvd., New Orleans
La. 70002; (504) 833-1111

Total assets managed	$355,000,000
Total discretionary assets	$355,000,000
Discretionary tax-exempt	$313,000,000
Types of accounts managed	CEFG
Tax-exempt clients	155
Minimum separate account	$5,000,000
No. of portfolio managers	7
Size of research staff	1

JMC Capital Management Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach uses growth stocks, sector rotation and relative strength analysis. It is both top-down and bottom-up in approach. In fixed income it is an active duration manager, focusing on the one- to five-year government and investment-grade corporate issues. Special sectors such as asset-backed, CMOs, floating-rate and mortgage pass-through securities are used.

Franklin H. Jones Jr. is chief investment officer; Earl Johnson Jr. is client contact in Washington at (202) 835-0428.

Johnson Investment Counsel Inc.

5556 Cheviot Road, Cincinnati, Ohio
45247; (513) 385-4001

Total assets managed	$550,000,000
Total discretionary assets	$550,000,000
Discretionary tax-exempt	$306,000,000
401(k)/457 assets managed	$1,000,000
International equity assets	$10,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	183
Minimum separate account	$250,000
No. of portfolio managers	7
Size of research staff	4

Johnson Investment Counsel Inc. is an active equity, active and passive fixed-income and balanced manager.

Its equity approach uses Graham & Dodd analysis and growth stocks in a top-down approach with sector analysis. For fixed income, it uses sector analysis, making selections based on quality, duration and special situations. Convertible bonds are emphasized.

Timothy E. Johnson is chief investment officer; Scott F. Muhlhauser is client contact.

Tom Johnson Investment Management Inc.

211 N. Robinson, Suite 1510,
Oklahoma City, Okla. 73102; (405)
236-2111

Total assets managed	$1,100,000,000
Total discretionary assets	$1,100,000,000
Discretionary tax-exempt	$1,032,000,000
401(k)/457 assets managed	$77,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	167
Minimum separate account	$500,000
No. of portfolio managers	5

Tom Johnson Investment Management Inc. is an active equity, active fixed-income, balanced and tactical asset allocation manager.

Its equity approach combines a top-down sector rotational style with a relative valuation approach.

Its fixed-income accounts are managed in a conservative low-risk fashion based primarily on interest rate anticipation.

Thomas E. Johnson is chief investment officer; Richard H. Parry is client contact.

Jones Lang Wootton Realty Advisors

101 E. 52nd St., New York, N.Y.
10022; (212) 688-8181

Total assets managed	$2,000,000,000
Total discretionary assets	$2,000,000,000
Discretionary tax-exempt	$2,000,000,000
Equity real estate assets	$2,000,000,000
Types of accounts managed	CG
Tax-exempt clients	8
Minimum separate account	$150,000,000
No. of portfolio managers	13
Size of research staff	7

Jones Lang Wootton Realty Advisors, a real estate manager, takes an opportunistic approach that allows for value creation through aggressive property management, leasing, development management and leveraging techniques.

Steve Furnary and Frank Sullivan are chief investment officers; Stanislaw Maliszewski is client contact.

Jundt/Capen Associates Inc.

1550 Utica Ave. S., Suite 950,
Minneapolis, Minn. 55416; (612)
541-0677

Total assets managed	$1,814,000,000
Total discretionary assets	$1,814,000,000
Discretionary tax-exempt	$1,814,000,000
401(k)/457 assets managed	$158,000,000
International equity assets	$94,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	25
Minimum separate account	$25,000,000
No. of portfolio managers	3

Jundt/Capen Associates Inc., an active growth-stock manager, follows a disciplined style for its emerging growth and core portfolios.

James R. Jundt is chief investment officer and client contact.

Justin Asset Management

4350 N. Fairfax Drive, Arlington, Va.
22203; (703) 226-8881 or (800)
234-7585

Total assets managed	$70,000,000
Total discretionary assets	$70,000,000
Discretionary tax-exempt	$42,000,000
401(k)/457 assets managed	$12,000,000
International equity assets	$7,000,000
International fixed-income assets	$3,000,000
Types of accounts managed	CEFU
Tax-exempt clients	31
Minimum separate account	$250,000
No. of portfolio managers	4
Size of research staff	2

Justin Asset Management is an active equity, active fixed-income and balanced manager.

In equities, it buys stocks of businesses with strong finances and high free-cash returns at discounts and holds until the value is realized.

Its fixed-income approach uses interest rate anticipation, buying bonds of strongly financed entities with a tendency to remain short.

William Kapner is chief investment officer and client contact.

K

Kahn Brothers & Co. Inc.

1 Exchange Plaza, New York, N.Y.
10006; (212) 269-7450

Total assets managed	$699,000,000
Total discretionary assets	$289,000,000
Discretionary tax-exempt	$186,000,000
International equity assets	$10,000,000
Types of accounts managed	CEF
Tax-exempt clients	22
Minimum separate account	$500,000
No. of portfolio managers	9

Kahn Brothers & Co. Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach employs fundamental Graham & Dodd analysis to identify investments with potential for value realization. In fixed income it concentrates on higher-grade credits and frequently invests in less conventional instruments to improve yield without sacrificing credit quality.

Alan R. Kahn is chief investment officer; Thomas G. Kahn is client contact.

Daniel S. Kampel Associates

1 Liberty Plaza, New York, N.Y.
10006; (212) 346-6040

Total assets managed	$682,000,000
Total discretionary assets	$679,000,000
Discretionary tax-exempt	$676,000,000
Types of accounts managed	CFU
Tax-exempt clients	17
Minimum separate account	$5,000,000
No. of portfolio managers	3

Daniel S. Kampel Associates Inc. is an active and passive equity, active and passive fixed-income and balanced manager.

Its equity approach is value-oriented, focusing on growth and emerging growth stocks and using sector rotation. Its fixed-income approach uses interest rate anticipation.

Daniel S. Kampel is chief investment officer and client contact.

Kanawha Capital Management Inc.

1301 N. Hamilton St., Richmond, Va.
23230; (804) 359-3900

Total assets managed	$105,000,000
Total discretionary assets	$75,000,000
Discretionary tax-exempt	$41,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	36
Minimum separate account	$250,000
No. of portfolio managers	3

Kanawha Capital Management Inc. is an active equity and balanced manager.

The firm adds value through asset allocation and stock selection. Timing decisions are based on top-down assessment of valuation, fundamental and market psychology data. Stock selection is bottom-up, based on analysis of p/e, earnings consistency, cash flow and ROI. Its fixed-income approach uses interest rate anticipation.

Paul C. Munson is chief investment officer; Charles K. Fox is client contact.

Kangyo Kakumaru Capital Management Corp.

1 World Financial Center, New York,
N.Y. 10281; (212) 587-7654

Total assets managed	$42,000,000
Total discretionary assets	$42,000,000
Discretionary tax-exempt	$0
Minimum separate account	$1,000,000

No. of portfolio managers	16
Size of research staff	56

Kangyo Kakumaru Capital Management Corp., an active international equity manager, emphasizes growth and emerging growth stocks chosen through fundamental research and identification of investment themes.

Tadao Doshida is chief investment officer; Yuji Sasao is client contact.

Kanne, Paris & Hoban Inc.

135 S. LaSalle, Chicago, Ill. 60603;
(312) 372-2255

Total assets managed	$103,000,000
Total discretionary assets	$103,000,000
Discretionary tax-exempt	$62,000,000
Types of accounts managed	CE
Minimum separate account	$500,000
No. of portfolio managers	3
Size of research staff	2

Kanne, Paris & Hoban Inc., an active equity manager, takes a conservative and risk-averse investment approach, emphasizing Graham & Dodd analysis to identify and invest in undervalued equities. It invests in companies with large market capitalization and strong profit performance overlooked by the market.

Jeffrey E. Kanne is chief investment officer; Ernest J. Dunston is client contact.

Karpus Investment Management

5 Tobey Village Office Park, Pittsford,
N.Y. 14534; (716) 586-4680

Total assets managed	$85,000,000
Total discretionary assets	$85,000,000
Total discretionary tax-exempt	$13,000,000
Types of accounts managed	EFU
Tax-exempt clients	24
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	4

Karpus Investment Management is an active and passive fixed-income, balanced, international active fixed-income and short-term manager.

Its equity approach involves fundamental research and playing the discounts to net asset value on closed-end domestic and international bond funds. Its fixed-income approach uses sector analysis, riding yield curves, barbelling and the application of duration analysis, along with interest rate judgments.

George W. Karpus is chief investment officer and client contact.

Karsten Realty Advisors

12121 Wilshire Blvd., Suite 900, Los
Angeles, Calif. 90025; (213)
826-0035

Total assets managed	$938,000,000
Total discretionary assets	$754,000,000
Discretionary tax-exempt	$726,000,000
Equity real estate assets	$634,000,000
Mortgage assets	$92,000,000
Types of accounts managed	CGU
Tax-exempt clients	19
Minimum separate account	$10,000,000
No. of portfolio managers	13
Size of research staff	2

Karsten Realty Advisors, a real estate investment manager with a strong emphasis on research, focuses on equity ownership and equity-oriented mortgages for its separate account clients. It also offers a series of closed-end commingled funds. It has developed an expertise in special management opportunities, including individual properties, both equity and debt, and portfolios of properties requiring special attention.

Robert A. Feren is chief investment officer; A. Redmond Doms Jr. and Carl A. Mayer Jr. are client contacts.

KAS Investment Consultants

13005 S.E. 46th, Bellevue, Wash.
98006; (206) 641-7645

Total assets managed	$8,000,000
Total discretionary assets	$8,000,000
Discretionary tax-exempt	$4,000,000
Types of accounts managed	C
Tax-exempt clients	8
Minimum separate account	$100,000
No. of portfolio managers	2
Size of research staff	1

KAS Investment Consultants is an active equity, active fixed-income and balanced manager.

Its equity approach focuses on stocks with strong fundamental value. Low p/e stocks, market timing and Graham & Dodd analysis are employed. Its fixed-income approach is driven by interest rate anticipation. Credit conditions, economic forecasts and markets are reviewed.

R.J. Wells-Henderson is chief investment officer; Richard L. Wilkins is client contact.

Kayne, Anderson Investment Management Inc.

1800 Avenue of the Stars, Suite 1425,
Los Angeles, Calif. 90067; (213)
284-5500

Total assets managed	$350,000,000
Total discretionary assets	$250,000,000
Discretionary tax-exempt	$80,000,000
Types of accounts managed	CF
Minimum separate account	$500,000
No. of portfolio managers	8
Size of research staff	6

Kayne Anderson Investment Management Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach is based on a rising dividends philosophy, buying high-quality, low-debt companies that consistently have raised dividends in the past 10 years. In fixed income, it uses interest rate anticipation, buying high-quality issues and with an average maturity of two to eight years.

Ric Kayne is chief investment officer; Allan Rudnick is client contact.

Keeley Asset Management

401 S. LaSalle St., Chicago, Ill. 60605;
(312) 786-5000

Total assets managed	$13,000,000
Total discretionary assets	$13,000,000
Discretionary tax-exempt	$2,000,000
Types of accounts managed	C
Tax-exempt clients	8
Minimum separate account	$100,000
No. of portfolio managers	1
Size of research staff	1

Keeley Asset Management Corp., an active equity manager, offers three strategies.

It purchases securities of companies involved in corporate reorganization or spinoffs, emphasizing those selling below book value or expected to be purchased for cash; securities deemed special situations with a market timing overview; and high-yield securities, writing options against the stock.

John L. Keeley Jr. is chief investment officer and client contact.

Kemper Asset Management

120 S. LaSalle St., Chicago, Ill. 60603;
(312) 845-1881

Total assets managed	$2,592,000,000
Total discretionary assets	$2,201,000,000
Discretionary tax-exempt	$2,201,000,000
Types of accounts managed	CEF
Tax-exempt clients	41
Minimum separate account	$10,000,000
No. of portfolio managers	5
Size of research staff	25

Kemper Asset Management Co. is an active equity, active and passive fixed-income and balanced short-term manager.

Its equity approach is fundamental, selecting stocks possessing superior earnings growth potential at valuations that underestimate that growth.

Its fixed-income approach follows a sector allocation style that emphasizes issuer selection within a controlled framework of plus or minus 25% of the duration of the Shearson Lehman Hutton Government/Corporate index.

Stephen B. Timbers is chief investment officer; Geoffrey P. Lutz, James S. Cusick and S.A. Lincoln are client contacts.

Kemper Financial Services

120 S. LaSalle St., Chicago, Ill. 60603;
(312) 845-8465

Total assets managed	$56,439,000,000

Kemper Financial Services is the investment management and financial products company under the umbrella of Kemper Financial Cos. Inc., a non-operating holding company for the financial service units of the Kemper Corp.

Stephen B. Timbers is chief investment officer; Ed Miner is client contact.

Kempner Capital Management

P.O. Box 119, Galveston, Texas
77553; (409) 765-6671

Total assets managed	$493,000,000
Total discretionary assets	$493,000,000
Discretionary tax-exempt	$117,000,000
401(k)/457 assets managed	$4,000,000
Types of accounts managed	CEFU
Tax-exempt clients	8
Minimum separate account	$5,000,000
No. of portfolio managers	2

Kempner Capital Management is an active and passive equity, passive fixed-income and active international equity manager.

Its equity approach emphasizes Graham & Dodd analysis and low p/e stocks with limited downside risk. Options are used. In fixed-income, it buys high-quality, full-faith-and-credit governments.

Harris L. Kempner Jr. is chief investment officer; Donna Gindrup is client contact.

Kennedy Associates Inc.

2400 Financial Center, Seattle, Wash.
98161; (206) 624-9640

Total assets managed	$3,398,000,000
Discretionary tax-exempt	$3,398,000,000
Equity real estate assets	$822,000,000
Mortgage assets	$27,000,000
Types of accounts managed	EFGU
Tax-exempt clients	163
Minimum separate account	$10,000,000
No. of portfolio managers	13
Size of research staff	5

Kennedy Associates Inc. is an active equity, active fixed-income, balanced, real estate and short-term manager.

Its primary equity approach concentrates on stocks selling at a sufficient discount to capitalization of future earnings stream to provide a total rate of return potential exceeding that of competing financial instruments.

Its primary fixed-income approach focuses on interest rate anticipation and sector rotation using a business cycle approach. Interest rate sensitivity and duration convexity are actively managed via portfolio structure and security selection.

Its real estate approach focuses on equity ownership of commercial structures in prime locations providing competitive current return and long-term appreciation potential.

Duff Kennedy is chief investment officer; Roger V. Kelly is client contact.

Kennedy Capital Management Inc.

425 N. New Ballas Road, St. Louis,
Mo. 63141; (314) 432-0400

Total assets managed	$64,000,000
Total discretionary assets	$64,000,000
Discretionary tax-exempt	$55,000,000
International equity assets	$2,000,000
Types of accounts managed	CEF
Tax-exempt clients	21
Minimum separate account	$200,000
No. of portfolio managers	3
Size of research staff	5

Kennedy Capital Management Inc. is an active equity and tactical asset allocation manager.

Its equity approach uses Graham & Dodd analysis and low p/e, high-yield growth and emerging growth stocks. Basic value/earnings momentum screens identify stocks with greatest total return potential.

Gerald T. Kennedy is chief investment officer and client contact.

The Kenwood Group Inc.

77 W. Washington, Suite 1615,
Chicago, Ill. 60602; (312) 368-1666

Total assets managed	$5,000,000
Total discretionary assets	$5,000,000
Discretionary tax-exempt	$5,000,000
Types of accounts managed	C
Tax-exempt clients	1
Minimum separate account	$100,000
No. of portfolio managers	2

The Kenwood Group Inc., an active equity manager with a value-oriented approach, focuses on stocks with a minimum downside risk in the medium capitalization range. Quantitative tools are used, but with a fundamental, management-intensive approach.

Barbara L. Bowles is chief investment officer and client contact.

Key Trust Co. of Maine

1 Canal Plaza, Portland, Maine 04112;
(207) 874-7113

Total assets managed	$600,000,000
Total discretionary assets	$600,000,000
Discretionary tax-exempt	$150,000,000
401(k)/457 assets managed	$15,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	200
Minimum separate account	$200,000
No. of portfolio managers	4

Key Trust Co. of Maine is an active equity, active and passive fixed-income, tactical asset allocation, passive international equity and short-term manager.

Its primary equity approach is value-oriented, focusing on low p/e stocks and Graham & Dodd analysis. Its active fixed-income approach uses interest rate anticipation. Options are used occasionally.

Gary Robinson is client contact.

Key Trust Co. of the Northwest

1000 Second Ave., 11th Floor, Seattle,
Wash. 98104; (206) 684-6100

Total assets managed	$320,000,000
Total discretionary assets	$320,000,000
Discretionary tax-exempt	$112,000,000
Pooled accounts	$32,000,000
Separate accounts	$80,000,000
401(k)/457 assets managed	$5,000,000
Tax-exempt clients:	
Commingled	300
Separate	40
Types of accounts managed	CEFU
Minimum separate account	$500,000
No. of portfolio managers	5
Size of research staff	4

Key Trust Co. of the Northwest is an active equity, passive fixed-income, balanced and short-term manager.

Its equity approach looks for existing value. It focuses on historical and current p/e ratios to identify inexpensive stocks. Its fixed-income approach focuses on secular interest rate trends and the status of the business cycle. Intermediate-term maturities are used.

Dana Harken is chief investment officer; Jacqueline Lorenz is client contact.

Keystone Investment Management Corp.

99 High St., Boston, Mass. 02110;
(617) 338-3600

Total assets managed	$754,000,000
Total discretionary assets	$754,000,000
Discretionary tax-exempt	$604,000,000
Types of accounts managed	CEFG
Tax-exempt clients	94
Minimum separate account	$1,000,000
No. of portfolio managers	7
Size of research staff	1

Keystone Investment Management Corp. is an active equity, active fixed-income and balanced manager.

In equities, it focuses on a 400-stock large-cap universe, ranked using a proprietary valuation model to identify low p/e, low price to book and value-oriented issues with high growth rates and positive momentum.

Its primary fixed-income approach is keyed to interest rate anticipation and the shape of the yield curve. Portfolios are constructed using investment-grade issues and intermediate-term average maturities.

George F. Wilkins Jr. is chief investment officer; Philip M. Byrne is client contact.

25 largest managers of 401(k)/457 assets

Firm	$ mils.*
Metropolitan Life	9,594
Aetna Life	7,989
John Hancock	7,214
Fidelity Investments	7,007
PRIMCO Capital	6,375
Prudential Investment	5,620
State Street Bank	5,500
G.E. Investment	5,305
Principal Financial	4,957
Massachusetts Mutual	4,800
Chancellor Capital	4,578
Provident Nat'l	4,441
CIGNA Asset	4,000
Morley Capital	4,000
NCNB Nat'l Bank	3,160
Continental Assurance	2,966
Nationwide Life	2,932
Ameritrust	2,657
Bankers Trust	2,643
Vanguard Group	2,561
Certus Financial	2,400
Manufacturers Life	2,400
IDS Trust	2,202
Thompson, Siegel	1,559
T. Rowe Price Guaranteed	1,510
Total	**108,370**

*Discretionary, tax-exempt assets

Luther King Capital Management

301 Commerce, Suite 1600, Fort
Worth, Texas 76102; (817)
332-3235

Total assets managed	$3,800,000,000
Total discretionary assets	$3,800,000,000
Discretionary tax-exempt	$2,890,000,000
Types of accounts managed	CEFG
Tax-exempt clients	125
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	5

Luther King Capital Management is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach emphasizes companies with sustainably high return on equity, assuming the prudent use of leverage and companies with substantially undervalued assets and excess cash flow.

Its fixed-income approach is based on interest rate anticipation. The firm also invests in sinking fund corporate issues where the sinker is active.

J. Luther King Jr. is chief investment officer; Emmett M. Murphy is client contact.

Kingwest & Co.

86 Avenue Road, Toronto, Ontario
M5R 2H2; (416) 927-7740

Total assets managed	$350,000,000
Total discretionary assets	$350,000,000
Discretionary tax-exempt	$310,000,000
For subsidiaries of U.S. firms	$38,000,000
Tax-exempt clients	17
U.S. subsidiaries	4
Types of accounts managed	CEFGU
Minimum separate account	$3,000,000
No. of portfolio managers	3
Size of research staff	1

Kingwest & Co., a Canadian firm, is an active equity, active fixed-income and international active equity manager.

In equities, it uses a cash flow/discount model and value-cash flow analysis. The firm seeks to acquire cheap assets and hold until the value is recognized. Its fixed-income approach uses a macroeconomic view to anticipate interest rates.

Richard Fogler is chief investment officer; Bruce Taylor is client contact.

Kirkpatrick, Pettis Management

10250 Regency Circle, Suite 200,
Omaha, Neb. 68114; (402)
392-7975

Total assets managed	$276,000,000
Total discretionary assets	$276,000,000
Discretionary tax-exempt	$195,000,000
401(k)/457 assets managed	$10,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	83
Minimum separate account	$100,000
No. of portfolio managers	4
Size of research staff	3

Kirkpatrick, Pettis Management is an active equity, passive fixed-income and balanced manager.

The firm uses a conservative, fundamental, bottom-up, value-oriented equity approach. In fixed income, it constructs relatively passive portfolios, laddering maturities and concentrating on credit and sector analyses.

Rodney D. Cerny is chief investment officer; W. Bruce Remington is client contact.

Kirr, Marbach & Co.

621 Washington St., Columbus, Ind.
47201; (812) 376-9444

Total assets managed	$472,000,000
Total discretionary assets	$472,000,000
Discretionary tax-exempt	$386,000,000
401(k)/457 assets managed	$5,000,000
Types of accounts managed	CEF
Tax-exempt clients	97
Minimum separate account	$2,000,000
No. of portfolio managers	4
Size of research staff	1

Kirr, Marbach & Co. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach emphasizes Graham & Dodd analysis.

Terry B. Marbach is chief investment officer; David M. Kirr is client contact.

Kleinwort Benson International Investment

200 Park Ave., New York, N.Y. 10166;
(212) 351-5800

Total assets managed	$433,000,000
Total discretionary assets	$395,000,000
Discretionary tax-exempt	$242,000,000
International equity assets	$232,000,000
International cash assets	$9,000,000
Types of accounts managed	CEF
Tax-exempt clients	16
Minimum separate account	$10,000,000
No. of portfolio managers	5

Kleinwort Benson International Investment Ltd. is an active international equity and fixed-income manager.

Its equity approach is based on the selection of companies with above-average earnings growth while recognizing the role of markets. Its fixed-income approach is top-down, emphasizing interest and exchange rate anticipation and sector analysis.

John F.H. Trott is chief investment officer; Julie M. Cochran is client contact.

Knight, Bain, Seath & Holbrook Capital Management Inc.

1 Toronto St., Suite 708, Toronto,
Ontario M5C 2V6; (416) 863-1433

Total assets managed	$2,837,000,000
Total discretionary assets	$2,837,000,000
Discretionary tax-exempt	$2,837,000,000
For subsidiaries of U.S. firms	$451,000,000
Dedicated/immunized bonds	$15,000,000
Tax-exempt clients	60
U.S. subsidiaries	11
Types of accounts managed	CEFGU
Minimum separate account	$20,000,000
No. of portfolio managers	6
Size of research staff	2

Kinght, Bain, Seath & Holbrook Capital Management Inc., a Canadian firm, is an active equity, active fixed-income and balanced manager.

Its equity approach uses Graham & Dodd analysis to identify growth and low p/e stocks. Its fixed-income approach uses interest rate anticipation.

D. Knight, H. Seath, R. Holbrook, P. Pennal, M. Waring and R. Armstrong are chief investment officers. Mr. Seath is client contact.

KR Capital Advisors Inc.

450 Park Ave., New York, N.Y. 10022;
(212) 888-6300

Total assets managed	$886,000,000
Total discretionary assets	$886,000,000
Discretionary tax-exempt	$825,000,000
401(k)/457 assets managed	$54,000,000
Types of accounts managed	CFG
Tax-exempt clients	17
Minimum separate account	$10,000,000
No. of portfolio managers	2

KR Capital Advisors Inc., an active equity manager, has a bias toward Graham & Dodd, but takes a more opportunistic approach analyzed from a corporate finance or entrepreneurial perspective.

Edward D. Klein is client contact.

Kreger Capital Management

20180 Governors Highway, Olympia
Fields, Ill. 60461; (708) 481-1314

Total assets managed	$22,000,000
Total discretionary assets	$18,000,000
Discretionary tax-exempt	$16,000,000
401(k)/457 assets managed	$2,000,000
Types of accounts managed	CEF
Tax-exempt clients	35
Minimum separate account	$100,000
No. of portfolio managers	2
Size of research staff	1

Kreger Capital Management is an active and pas-

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: Government
U: Union

sive equity, passive fixed-income, balanced, real estate and short-term manager.

Its equity approach is 70% reliance on market timing, 20% on industry selection and 10% on individual stock selection. Its fixed-income approach uses interest rate anticipation. Options are used.

Donald F. Kreger is chief investment officer and client contact.

Krehbiel & Hubbard

10604 N.E. 38th Place, Kirkland,
Wash. 98003; (206) 822-0909

Total assets managed	$450,000,000
Total discretionary assets	$350,000,000
Discretionary tax-exempt	$350,000,000
401(k)/457 assets managed	$30,000,000
Mortgage assets	$21,000,000
Dedicated/immunized assets	$70,000,000
Types of accounts managed	CU
Tax-exempt clients	52
Minimum separate account	$5,000,000
No. of portfolio managers	5

Krehbiel & Hubbard is an active equity, active and passive fixed-income, short-term and mortgage manager.

Its equity approach is value- and growth-oriented. Its fixed-income approach is conservative, using electric utility, U.S. government-backed and finance company issues. The maturity typically runs less than the Shearson Lehman Hutton index.

Michael G. Russell is chief investment officer; Donald M. Weller is client contact.

L

Laketon Investment Management

P.O. Box 31, Royal Bank Plaza,
Toronto, Ontario M5J 2J1; (416)
868-1380

Total assets managed	$900,000,000
Total discretionary assets	$900,000,000
Discretionary tax-exempt	$750,000,000
For subsidiaries of U.S. firms	$125,000,000
Tax-exempt clients	30
U.S. subsidiaries	1
Types of accounts managed	CEGU
Minimum separate account	$5,000,000
No. of portfolio managers	5

Laketon Investment Management, a Canadian firm, is an active equity, active fixed-income and balanced manager.

Its equity approach is to invest 50% in the current business cycle sector, 20% in Graham & Dodd sector and 25% to 30% in special situations with superior managers.

Laketon's fixed-income approach is a classic "barbell" strategy. Relative to other active managers, the firm emphasizes the longer term both as to trend analysis and average holding period. The firm trades around the basic maturity strategy to add value with little incremental risk by means of relative value swaps.

Alden White is chief investment officer and client contact.

Alan B. Lancz & Associates

3930 Sunforest Court, Toledo, Ohio
43623; (419) 474-6733

Total assets managed	$16,000,000
Total discretionary assets	$16,000,000
Discretionary tax-exempt	$10,000,000
Types of accounts managed	CEF
Tax-exempt clients	60
Minimum separate account	$100,000
No. of portfolio managers	1
Size of research staff	3

Alan B. Lancz & Associates Inc. is an active equity, active fixed-income, balanced and active international equity manager.

Its equity approach uses growth, emerging growth and low p/e stocks with Grtaham & Dodd analysis and market timing. Special situations also are used, emphasizing quality of management. In fixed income, it uses interest rate anticipation and sector analysis.

Alan B. Lancz is chief investment officer; Jody Stoner is client contact.

LaSalle Advisors Ltd.

11 S. LaSalle St., Chicago. Ill. 60603;
(312) 782-5800

Total assets managed	$4,100,000,000
Total discretionary assets	$2,400,000,000
Discretionary tax-exempt	$2,400,000,000
Equity real estate assets	$2,400,000,000
Types of accounts managed	CFGU
Tax-exempt clients	108
Minimum separate account	$100,000,000
No. of portfolio managers	8

LaSalle Advisors Ltd., a real estate manager, makes equity purchases of larger, high-quality office buildings, shopping centers and industrial parks with the objective of producing superior returns through aggressive management with its own professional on-site management.

Kenneth M. Campia is chief investment officer; William M. Thompson (West), Christopher J. Burke (Midwest, East) and Hugh E. Reams Jr. (South, Mideast), are client contacts.

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: Government
U: Union

LaSalle National Bank

135 S. LaSalle St., Chicago, Ill. 60603;
(312) 641-3823

Total assets managed	$8,400,000,000
Total discretionary assets	$1,703,000,000
Discretionary tax-exempt	$1,205,000,000
Pooled accounts	$499,000,000
Separate accounts	$706,000,000
401(k)/457 assets managed	$320,000,000
Mortgage assets	$81,000,000
Tax-exempt clients	
Commingled	273
Separate	110
Types of accounts managed	CGU
Minimum separate account	$5,000,000
No. of portfolio managers	10
Size of research staff	7

LaSalle National Bank is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach offers a family of quantitatively driven investment products, including core, value and small-cap styles. Its fixed-income approach establishes a benchmark with the clients, then constructs a portfolio with a yield advantage and positive convexity. Duration is managed based on interest rate forecasts.

Bentley Myer is chief investment officer; James F. Sullivan is client contact.

Latimer & Buck Real Estate Advisors

121 S. Broad St., Philadelphia, Pa.
19107; (215) 985-3921

Total assets managed	$1,314,000,000
Total discretionary assets	$1,314,000,000
Discretionary tax-exempt	$1,314,000,000
Equity real estate assets	$266,000,000
Mortgage assets	$1,048,000,000
Types of accounts managed	G
Tax-exempt clients	2
Minimum separate account	$5,000,000
No. of portfolio managers	1
Size of research staff	3

Latimer & Buck Real Estate Advisors, a real estate manager, concentrates on equity-oriented investments on income-producing property using participating and convertible mortgages, joint venture and equity structures.

Douglas S. Callantine is chief investment officer; Andrew Sheffler is client contact.

The Laughlin Group Advisors Inc.

12655 S.W. Center, Suite 280,
Beaverton, Ore. 97005; (503)
643-7032

Total assets managed	$1,650,000,000
Tax-exempt assets managed:	
Total	$1,650,000,000
Assigned to other firms	$1,650,000,000
Types of accounts managed	C
Tax-exempt clients	54
Minimum separate account	$10,000,000
No. of portfolio managers	5
Size of research staff	4

The Laughlin Group Advisors Inc. is a manager of guaranteed investment contract portfolios. All of the $1.65 billion in tax-exempt assets is managed externally by GIC issuers.

Accounts are structured to provide stable cash flow, diversity by issuer, strong credit quality and high yields.

William F. Gardner is chief investment officer; Gary McMahill is client contact.

Laurentian Investment Management (Canada) Inc.

330 Front St. W., Third Floor, Toronto,
Ontario M5V 3B7; (416) 343-5355

Total assets managed	$2,236,000,000
Discretionary tax-exempt	$1,376,000,000
For subsidiaries of U.S. firms	$34,000,000
Mortgage assets	$22,000,000
Non-North American equities	$60,000,000
Tax-exempt clients	210
U.S. subsidiaries	5
Types of accounts managed	C
Minimum separate account	$5,000,000
No. of portfolio managers	7
Size of research staff	1

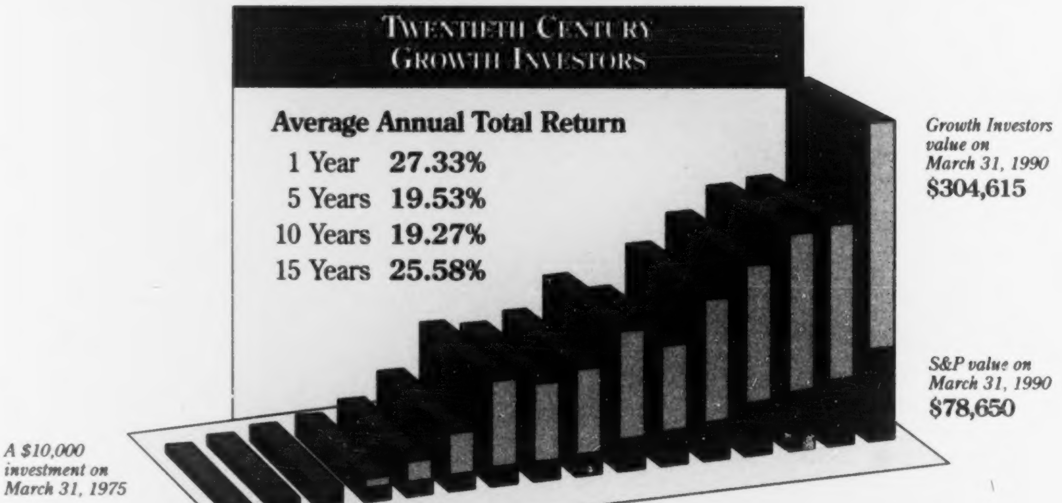
Laurentian Investment Management (Canada) Inc., a Canadian firm, is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach emphasizes a top-down/fundamentalist style, seeking value and using sector rotation.

Its fixed-income approach is top-down, based on fundamental analysis leading to an interest rate forecast. Managers use sector spread trades and trade against yield curve anomalies.

Selwyn J. Kletz is chief investment officer; Donald D. Landreville is client contact.

Got any plans for the next 15 years?



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C.J. Lawrence Management

1290 Avenue of Americas, New York,
N.Y. 10104; (212) 468-5000

Total assets managed	$300,000,000
Discretionary tax-exempt	$32,000,000
401(k)/457 assets managed	$17,000,000
Types of accounts managed	C
Tax-exempt clients	4
Minimum separate account	$500,000
No. of portfolio managers	6

C.J. Lawrence Management is an active equity, active fixed-income and balanced manager.

Its equity approach emphasizes low p/e stocks. Its fixed-income approach focuses on interest rate anticipation.

James E. Moltz is chief investment officer; G. Richard Stamberger is client contact.

Lazard Freres Asset Management

1 Rockefeller Plaza, New York, N.Y.
10020; (800) 228-0203

Total assets managed	$14,385,000,000
Total discretionary assets	$14,385,000,000
Discretionary tax-exempt	$12,623,000,000
401(k)/457 assets managed	$90,000,000
International equity assets	$800,000,000
Dedicated/immunized assets	$350,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	221
Minimum separate account	$10,000,000
No. of portfolio managers	22
Size of research staff	7

Lazard Freres Asset Management is an active equity, active fixed-income, balanced, active international equity and small-cap manager.

In equities, the firm uses proprietary research to discover and validate stocks where it received more (high return on equity and assets) than it paid for (price/book value).

Its fixed-income approach calls for a value-oriented approach. Accounts are managed on a total return basis; qualitative and quantitative valuation techniques are used to determine the maturity mix, sector, quality and individual securities of portfolios.

Herbert Guliquist is chief investment officer; Anthony J. Dote and Mark W. Hamilton are client contacts.

WR Lazard & Co.

14 Wall St., 18th Floor, New York,
N.Y. 10005; (212) 406-2700

Total assets managed	$1,718,000,000
Discretionary tax-exempt	$1,708,000,000
Equity indexed assets	$80,000,000
Fixed-income indexed assets	$1,600,000,000
Dedicated/immunized assets	$21,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	24
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	3

WR Lazard & Co. specializes in conservative, quantitative strategies for active equity, active and passive fixed-income and balanced portfolios.

The firm's investment strategy is based on quantitative and qualitative analysis, followed by risk assessment.

Alan B. Bond and Robert I. Spruill are client contacts.

R.M. Leary & Co. Inc.

3300 E. First Ave., Suite 380, Denver,
Colo. 80206; (303) 320-1063

Total assets managed	$25,000,000
Discretionary tax-exempt	$18,000,000
Types of accounts managed	CEFU
Tax-exempt clients	100
Minimum separate account	$100,000
Size of research staff	2

R.M. Leary & Co. Inc. is a balanced manager.

Its approach uses market timing in an aggressive common stock fund during rising markets and defensive positions in a bond or money market fund during declining markets. In fixed income, interest rate anticipation is used. Bearish markets dictate a defensive move to money market funds that pay average competitive returns.

Kate Leary Lee is chief investment officer and client contact.

Leavy Investment Management Inc.

6151 Powers Ferry Road, Suite 590,
Atlanta, Ga. 30339; (404) 951-9314

Total assets managed	$500,000,000
Total discretionary assets	$500,000,000
Discretionary tax-exempt	$500,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	35
Minimum separate account	$4,000,000
No. of portfolio managers	4
Size of research staff	1

Leavy Investment Management Inc. is an active equity, active and passive fixed-income and balanced manager.

Its equity approach is value oriented and somewhat contrarian, focusing on identifying well-run, financially sound companies whose stock is temporarily depressed.

Its primary fixed-income approach emphasizes high quality (A or better) and intermediate maturities. The firm makes gradual changes in maturities in response to changes in interest rates and changes emphasis between Treasuries, agencies and corporates on the basis of current vs. historical yield spreads.

John M. Leavy is chief investment officer; Barbara A. Reiser is client contact.

Lee, Robinson & Steine Inc.

First American Center, Fourth Floor,
Nashville, Tenn. 37238; (615)
748-2273

Total assets managed	$2,500,000,000
Total discretionary assets	$1,517,000,000
Discretionary tax-exempt	$908,000,000
401(k)/457 assets managed	$40,000,000
Equity indexed assets	$61,000,000
Fixed-income indexed assets	$28,000,000
Types of accounts managed	CEFGU
Minimum separate account	$2,500,000
No. of portfolio managers	8
Size of research staff	1

Lee, Robinson & Steine Inc. is an active equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

The firm uses quantitatively based tactical asset allocation to control risk. In equities, a multifactor model and technical analysis are used, emphasizing value and momentum. Its fixed-income approach is based on interest rate anticipation with industry and quality sector analysis.

Charles H. Robinson is chief investment officer; Frederick Crown is client contact.

Legg Mason Capital Management Inc.

111 S. Calvert St., Baltimore, Md.
21202; (301) 547-2558

Total assets managed	$450,000,000
Total discretionary assets	$435,000,000
Discretionary tax-exempt	$125,000,000
401(k)/457 assets managed	$8,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	90
Minimum separate account	$500,000
No. of portfolio managers	5
Size of research staff	10

Legg Mason Capital Management Inc. is an active equity, active fixed-income, balanced and short-term manager.

The firm adheres to a broad, bottom-up, value-oriented equity approach. For fixed income, it is a relative-value manager, buying issues in market sectors that appear on historical yield spread basis.

Peter A. Lareau is chief investment officer; Philip E. Sachs is client contact.

Lehigh Valley Bank

65 E. Elizabeth Ave., Bethlehem, Pa.
18018; (215) 861-1769

Total assets managed	$150,000,000
Total discretionary assets	$90,000,000
Discretionary tax-exempt	$29,000,000
Pooled accounts	$9,000,000
Separate accounts	$20,000,000
401(k)/457 assets managed	$12,000,000
Tax-exempt clients:	
Commingled	20
Separate	90
Types of accounts managed	CG
Minimum separate account	$500,000
No. of portfolio managers	2

Lehigh Valley Bank, a balanced manager, focuses on low p/e stocks, generally of large-cap, well-known companies. Its fixed-income approach uses interest rate anticipation and ladders maturities.

Edward A. Kramer is chief investment officer; Judith M. Mindack is client contact.

Lehman Ark Management

55 Water St., New York, N.Y. 10041;
(212) 668-8500

Total assets managed	$14,025,000,000
Total discretionary assets	$14,025,000,000
Discretionary tax-exempt	$13,904,000,000
International equity assets	$500,000,000
Fixed-income indexed assets	$1,900,000,000
Dedicated/immunized assets	$68,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	199
Minimum separate account	$10,000,000
No. of portfolio managers	14
Size of research staff	5

Lehman Ark Management Co. Inc., formerly the institutional division of Lehman Management Co., is an active equity, active and passive fixed-income and balanced manager.

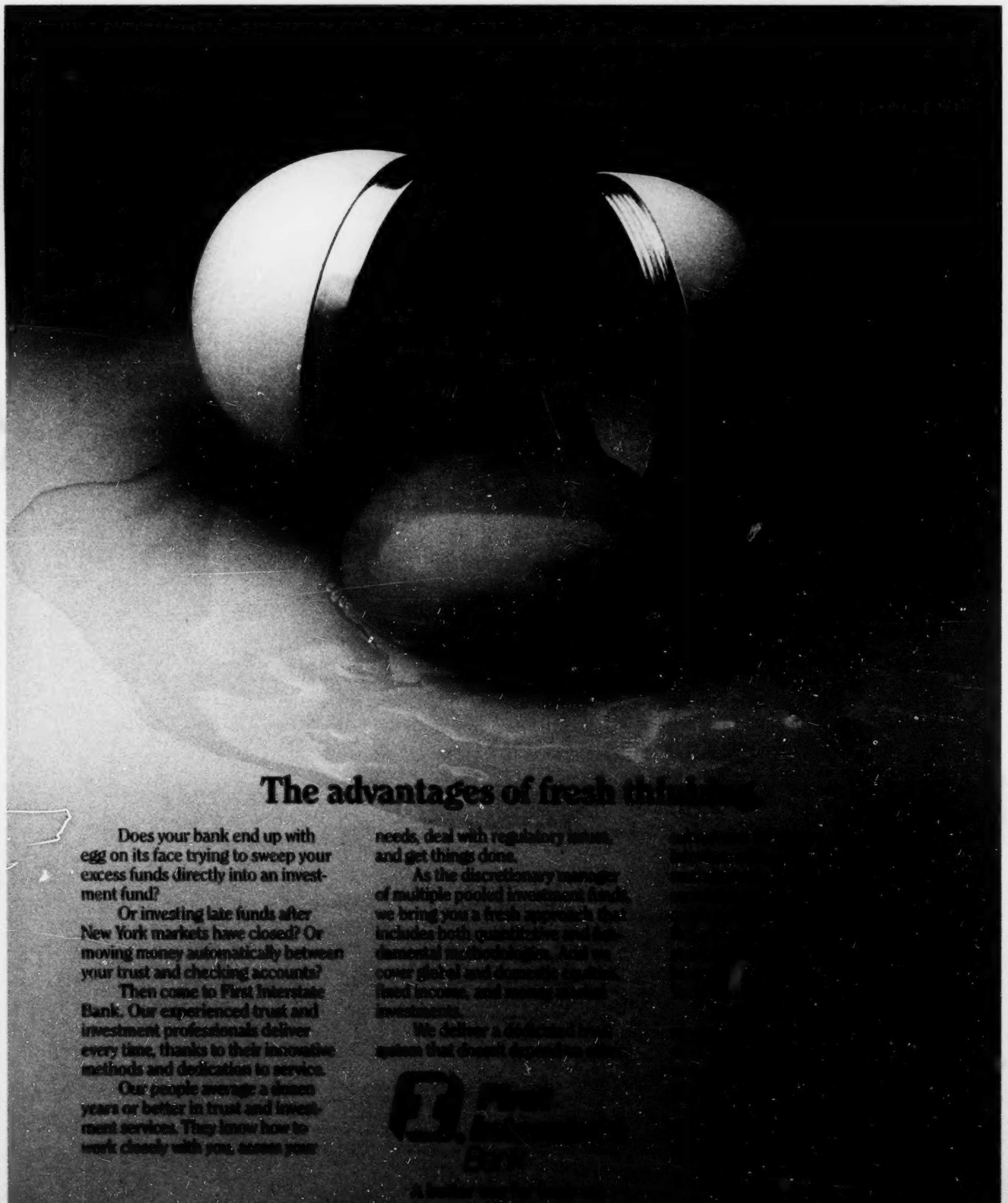
Its primary equity approach for corporate funds is to purchase growth-oriented securities that sell at reasonable prices. For Taft-Hartley funds, the firm is contrarian and value oriented.

Its active fixed-income approach is conservative, emphasizing high-quality intermediate securities and minimizing interest rate risk. The index products are customized, emphasizing controlled maturity movements while adding value through security selection and sector rotation.

Coleman M. Brandt and C. Charles Hetzel are the chief investment officers; H. Scott Higgins, Robert W. Norton and Joseph P. Scanlon are client contacts.

Lehndorff & Babson Real Estate Counsel

2501 Cedar Springs, Suite 550,
Dallas, Texas 75201; (214)
855-5830



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We deliver a dedicated trust system that doesn't depend on [illegible]

Total assets managed	$3,673,000,000
Total discretionary assets	$1,627,000,000
Discretionary tax-exempt	$781,000,000
Equity real estate	$781,000,000
Types of accounts managed	CEGU
Tax-exempt clients	45
Minimum separate account	$25,000,000
Size of research staff	13

Lehndorff & Babson Real Estate Counsel, a real estate manager, invests in larger office and retail properties with potential for creating value through management during a five- to 15-year holding period.

M. Thomas Lardner is chief investment officer; G. Andrews Smith is client contact.

Leith Wheeler Investment Counsel Ltd.

1930-609 Granville St., Vancouver, British Columbia V7Y 1G5; (604) 683-3391

Total assets managed	$495,000,000
Discretionary tax-exempt	$354,000,000
For subsidiaries of U.S. firms	$18,000,000
Types of accounts managed	CFU
Tax-exempt clients	18
U.S. subsidiaries	1
Minimum separate account	$1,000,000
No. of portfolio managers	6

Leith Wheeler Investment Counsel Ltd., a Canadian firm, is an active and passive equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach is value-oriented using low p/e stocks and Graham & Dodd principles. Its fixed-income approach uses interest rate anticipation with emphasis on short- to medium-term securities.

Murray Leith is chief investment officer; B.G. Scott is client contact.

Leland O'Brien Rubinstein Associates Inc.

P.O. Box 71970, Los Angeles, Calif., 90071-0970; (213) 488-2700

Leland O'Brien Rubinstein Associates Inc. specializes in risk control strategies.

Its Dynamic Asset Allocation technology is used in a variety of applications, the most well-known of which is called portfolio insurance.

Charles A. Baker is client contact.

Leominster Inc.

207 E. Redwood St., Suite 802, Baltimore, Md. 21202; (301) 576-0100

Total assets managed	$720,000,000
Total discretionary assets	$714,000,000
Discretionary tax-exempt	$468,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	16
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	3

Leominster Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach focuses on stocks with higher projected growth of earnings, higher yield and lower risk than the market. Undervalued securities relative to future prospects, some special situation stocks and a contrarian approach are used.

For fixed income, the firm structures a corporate bond portfolio well diversified across issues and industries. Its portfolio includes discounted and non-callable bonds, convertibles and special situations.

Gordon Croft is chief investment officer and client contact.

The Leonard Management Group

407 W. Avon Road, Avon, Conn. 06001; (203) 673-3237

Total assets managed	$25,000,000
Total discretionary assets	$25,000,000
Discretionary tax-exempt	$9,000,000
Types of accounts managed	CG
Tax-exempt clients	9
Minimum separate account	$250,000
No. of portfolio managers	1

The Leonard Management Group is an active equity, fixed-income, balanced and tactical asset allocation manager.

It applies a top-down philosophy to asset allocation and a value-oriented, bottom-up approach to security selection. Portfolios are overweighted with asset groups offering highest risk-adjusted returns. Options are used. Fixed-income investments are based on interest rate anticipation.

James P. Leonard is chief investment officer and client contact.

Leshner Financial Services

700 Dixie Terminal Building, Cincinnati, Ohio 45202; (513) 629-2000

Total assets managed	$100,000,000
Total discretionary assets	$100,000,000
Discretionary tax-exempt	$75,000,000
Types of accounts managed	CEF
Tax-exempt clients	19
Minimum separate account	$250,000
No. of portfolio managers	6
Size of research staff	2

Leshner Financial Services Inc. is an active equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

Its equity approach is value-oriented, investing in companies with a consistent level of profitability that are being neglected by the market, purchased at or below the market p/e.

The key to its fixed-income approach is an econometric model that anticipates and reacts to changes in market trends.

Thomas S. Mench is chief investment officer and client contact.

Lexington Management

Park 80 West, Plaza II, Saddle Brook, N.J. 07662; (201) 945-7300

Total assets managed	$2,351,000,000
Total discretionary assets	$2,351,000,000
Discretionary tax-exempt	$867,000,000
401(k)/457 assets managed	$77,000,000
International equity assets	$237,000,000
International fixed-income assets	$37,000,000
International cash assets	$11,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	45
Minimum separate account	$5,000,000
No. of portfolio managers	8
Size of research staff	6

Lexington Management Corp. is an active equity and fixed-income, balanced, global equity and international fixed-income manager.

Its equity approach stresses relative value analysis. Seeking to preserve capital and earn a real rate of return, the firm will increase or decrease equity exposure based upon an analysis of risk factors in the investment environment. Its fixed-income approach uses interest rate anticipation and duration to manage portfolios; its neutral position is very defensive.

William S. Stack is chief investment officer; Joseph Barcic Jr. is client contact.

Leylegian Investment Management Inc.

855 Oak Grove Ave., Menlo Park, Calif. 94025; (415) 325-1055

Total assets managed	$300,000,000
Total discretionary assets	$300,000,000
Discretionary tax-exempt	$300,000,000
Types of accounts managed	CEFU
Tax-exempt clients	19
Minimum separate account	$10,000,000
No. of portfolio managers	3

Leylegian Investment Management Inc. is an active equity and balanced manager.

Its equity approach uses growth and low p/e stocks and sector rotation techniques. It uses a global top-down economic overview with heavy industry emphasis and follows a sell discipline.

Its fixed-income approach uses interest rate anticipation.

Jack H. Leylegian II is chief investment officer; Dorothy P. Leylegian is client contact.

Liberty Capital Management

11 Broadway, Suite 1066, New York, N.Y. 10004; (212) 509-0550

Total assets managed	$400,000,000
Total discretionary assets	$357,000,000
Discretionary tax-exempt	$200,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	26
Minimum separate account	$5,000,000
No. of portfolio managers	2

Liberty Capital Management, an active fixed-income and short-term manager, uses quantitative analysis of the Treasury and mortgage-backed securities markets to produce high returns with low volatility.

Jonathan Leader is chief investment officer; Susan Thompson is client contact.

Liberty National Bank and Trust Co.

P.O. Box 32500, Louisville, Ky. 40232; (502) 566-2000

Total assets managed	$2,104,000,000
Discretionary tax-exempt	$1,304,000,000
401(k)/457 assets managed	$45,000,000
Types of accounts managed	CEFG
Minimum separate account	$1,000,000
No. of portfolio managers	10
Size of research staff	1

Liberty National Bank and Trust Co. is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach uses market timing and is value-oriented, defined generally by high-yield, low p/e, low beta, absolute price to book, earnings predictability and a willingness to switch investment focus.

Its fixed-income approach seeks below-average risk, but portfolios are fully managed to reflect changing risk-reward ratios.

Robert C. Gray Jr. is chief investment officer; Guthrie P. Culbertson is client contact.

Lieber & Co.

2500 Westchester Ave., Purchase, N.Y. 10577; (914) 694-2020

Total assets managed	$4,008,000,000
Total discretionary assets	$4,008,000,000
Discretionary tax-exempt	$1,023,000,000
Types of accounts managed	CEFG
Tax-exempt clients	36
Minimum separate account	$1,000,000
No. of portfolio managers	6
Size of research staff	15

Lieber & Co. is an active equity, active fixed-income, balanced, active international equity and short-term manager.

The firm emphasizes growth, emerging growth and low p/e stocks. It is fundamentally research-oriented, concentrating on income or undervalued issues.

Stephen A. Lieber is chief investment officer; Nola M. Falcone is client contact.

Life Insurance Co. of Georgia

P.O. Box 105006, Atlanta, Ga. 30348-5006; (404) 980-5100

Total assets managed	$2,000,000,000
Total discretionary assets	$1,800,000,000
Discretionary tax-exempt	$500,000,000
Pooled accounts	$50,000,000
GICs	$200,000,000
Annuities	$80,000,000
Other	$170,000,000
401(k)/457 assets managed	$160,000,000
Tax-exempt clients	3
Types of accounts managed	CG
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	7

Life Insurance Co. of Georgia is an active equity, active fixed-income and real estate manager.

Its equity approach uses quantitative and low p/e methods. Equities with good fundamentals and improving prospects are combined in a portfolio that optimizes return while controlling tracking error. Its fixed-income approach employs sector analysis. Instruments with good option-adjusted spreads and low event risk are used.

Its real estate approach emphasizes a diversified mix of institutional-size, general-purpose, income-producing properties with leasing and loan maturity characteristics matching those of incurred liabilities.

E.J. Yelton is chief investment officer; Harold Beale is client contact.

Lincluden Management

700 Dorval Drive, Suite 605, Oakville, Ontario L6K 3V3; (416) 842-8424

Total assets managed	$1,700,000,000
Total discretionary assets	$1,700,000,000
Discretionary tax-exempt	$1,700,000,000
For subsidiaries of U.S. firms	$125,000,000
Tax-exempt clients	21
U.S. subsidiaries	2
Types of accounts managed	C
Minimum separate account	$30,000,000
No. of portfolio managers	5

Lincluden Management, a Canadian firm, is an active equity and balanced manager.

Its contrarian, value-oriented equity approach emphasizes long-term rates of return on capital, balance sheet analysis and intrinsic value analysis.

Its fixed-income approach uses interest rate anticipation and sector analysis. Security selection emphasizes duration and quality. Corporate bonds (minimum rating of BBB) are included to realize higher yields. Risk is limited by in-house credit analysis.

Ian Jamieson is chief investment officer; George Youssef is client contact.

Lincoln Asset Management

500 N. Akard, Suite 3300, Dallas, Texas 75201; (214) 740-3410

Total assets managed	$110,000,000

T. Rowe Price
Guaranteed Asset Advisers, Inc.

Specialists in
Managing Guaranteed Investments

Contact: Keith Lewis (301) 547-2332

T. Rowe Price
100 E. Pratt Street, Baltimore, MD 21202

T.RowePrice

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AMLI REALTY CO.
125 South Wacker Drive
Chicago, Illinois 60606
(312) 443-1477

Total discretionary assets	$110,000,000
Discretionary tax-exempt	$110,000,000
Equity real estate	$110,000,000
Types of accounts managed	G
Tax-exempt clients	1
Minimum separate account	$15,000,000
No. of portfolio managers	2
Size of research staff	1

Lincoln Asset Management Co., a real estate manager, specializes in the acquisition of high-grade garden apartments. Purchases are all equity or low leverage, and are made in markets cycling out of overbuilding or imbalance.

David W. Gleeson is chief investment officer; Phil Van Syckle is client contact.

Lincoln Capital Management

200 S. Wacker Drive, Chicago, Ill.
60606; (312) 559-2880

Total assets managed	$13,737,000,000
Total discretionary assets	$13,737,000,000
Discretionary tax-exempt	$13,456,000,000
Fixed-income indexed assets	$3,933,000,000
Dedicated/immunized assets	$1,224,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	71
Minimum separate account	$100,000,000
No. of portfolio managers	11

Lincoln Capital Management Co. is an active equity, active and passive fixed-income and balanced manager.

Its equity approach emphasizes growth stocks. Its active fixed-income approach provides an assured minimum return; interest rate anticipation is employed. Enhanced and passive indexed management are offered.

J. Parker Hall III is chief investment officer and client contact.

Lincoln National Investment Management

1300 S. Clinton St., Fort Wayne, Ind.
46801; (219) 427-4740

Total assets managed	$20,886,000,000
Total discretionary assets	$20,886,000,000
Total discretionary tax-exempt	$8,273,000,000
401(k)/457 assets managed	$967,000,000
Equity real estate assets	$85,000,000
Mortgage assets	$1,903,000,000
Dedicated/immunized assets	$1,253,000,000
Types of accounts managed	CU
Tax-exempt clients	3,867
Minimum separate account	$5,000,000
No. of portfolio managers	17
Size of research staff	23

Lincoln National Investment Management employs a multimanager approach to provide equity, fixed-income, balanced, international, guaranteed and dedicated bonds/annuities management.

Five equity funds are offered, using quantitative analysis and growth and emerging growth stocks.

Its fixed-income approach is driven by interest rate anticipation. Four different maturity components are maintained and returns are maximized by shifting maturities in only one of the components, emphasizing value sectors and swapping issues to take advantage of spreads.

In addition to the assets above, $819 million in tax-exempt assets is managed on the firm's behalf by external managers.

Robert W. Crispin is chief investment officer; Bill L. Sanders is client contact.

Lingo Capital Management

3200 West End Ave., Nashville, Tenn.
37203; (615) 292-9546

Total assets managed	$9,000,000
Total discretionary assets	$9,000,000
Discretionary tax-exempt	$1,000,000
Types of accounts managed	C
Tax-exempt clients	2
Minimum separate account	$250,000
No. of portfolio managers	1

Lingo Capital Management is an active equity and active fixed-income manager.

In equities, it uses a quantitative approach to selecting large-cap NYSE stocks that meet stringent value and safety criteria.

Its fixed-income approach uses a statistical model to anticipate interest rate trends. Investments are selected only when rates are stable or declining.

Kenneth H. Lingo is chief investment officer and client contact.

Lipman, Carasso & Young

1880 Century Park E., Suite 1511, Los
Angeles, Calif. 90067; (213)
282-0300

Total assets managed	$213,000,000
Discretionary tax-exempt	$53,000,000
Types of accounts managed	CEF
Minimum separate account	$500,000
No. of portfolio managers	3

Lipman, Carasso & Young Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach focuses on growth stocks with low p/es and strong balance sheets. Its fixed-income approach employs short- to intermediate-term maturity, high-quality issues with changes depending on interest rate trends.

Pierre Carasso is chief investment officer; Stanley Heller is client contact.

Liquidity Fund Investment

1900 Powell St., Emeryville, Calif.
94608; (415) 652-1462

Total assets managed	$135,000,000
Total discretionary assets	$135,000,000
Discretionary tax-exempt	$50,000,000
Types of accounts managed	C
Tax-exempt clients	130
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	15

Liquidity Fund Investment, an active equity manager, manages portfolios of real estate securities that are purchased below net asset value. Securities include traded real estate equities and real estate limited partnerships.

Sean Subas is chief investment officer; Richard Wollack and Brent Donaldson are client contacts.

Loeb Partners Realty

521 Fifth Ave., New York, N.Y. 10175;
(212) 883-0371

Total assets managed	$800,000,000
Discretionary tax-exempt	$0
Minimum separate account	$5,000,000

Loeb Partners Realty an equity real estate manager, invests in existing, income-producing properties structured to the needs and requirements of investors.

Joseph S. Lesser is chief investment officer; Gary L. Naughton is client contact.

Lomas Advisors Inc.

2001 Bryan Tower, Suite 3300, Dallas,
Texas 75201; (214) 746-8290

Total assets managed	$1,066,000,000
Total discretionary assets	$1,066,000,000
Discretionary tax-exempt	$1,066,000,000
Equity real estate assets	$901,000,000
Mortgage assets	$165,000,000
Types of accounts managed	CEFG
Tax-exempt clients	40
Minimum separate account	$25,000,000
No. of portfolio managers	8
Size of research staff	26

Lomas Advisors Inc., a real estate manager, uses an approach that is driven by a top-down, intense research discipline that resists the property reaction mentality. Its scope and depth provide expertise as to both core and specialty real estate, structured as straight equity or hybrid debt.

David A. Ridley is chief investment officer; Berry Hamilton is client contact.

Lombard Odier Holdings U.K. Ltd.

Norfolk House, 13 Southampton
Place, London, WC1A 2AJ, U.K.;
071-831-2350

Total assets managed	$3,500,000,000
Discretionary tax-exempt	$264,000,000
International equity assets	$126,000,000
International fixed income assets	$138,000,000
Types of accounts managed	CF
Tax-exempt clients	4
Minimum separate account	$10,000,000

Lombard Odier Holdings U.K. Ltd. is the holding company for Lombard Odier International Portfolio Management Ltd. and Lombard Odier Investment Management Services Ltd. Both firms manage global/international equities and fixed-income.

The firm uses a macroeconomic approach to regional asset allocation. Portfolio managers/analysts implement the equity allocation within their geographic region. Interest rate anticipation is used in fixed income. Currency hedging, if applicable, is used. Options and fixed-income futures are used.

Robert van Maasdijk is chief investment officer; Karin Bonding is client contact in the U.K. and Jim Vogelzang is client contact in the U.S. at (303) 629-1900.

London & Bishopsgate International Inc.

866 Third Ave., New York, N.Y. 10022;
(212) 605-4800

Total assets managed	$925,000,000
Total discretionary assets	$925,000,000
Discretionary tax-exempt	$25 000,000
Global equity assets	$14,000,000
Global fixed-income assets	$11,000,000
Types of accounts managed	CF
Tax-exempt clients	3
Minimum separate account	$5,000,000
No. of portfolio managers	5
Size of research staff	11

London & Bishopsgate International Inc. is a passive international/global equity, active and passive international/global fixed-income, short-term and currency manager.

In equities, the firm offers customized indexed equity portfolios on a global, international or country-specific scale. Portfolios can be enhanced through the use of derivatives. Currency-positive management or hedging services and global tactical asset allocation are available.

In fixed income, the firm manages short-term portfolios using derivatives on core investments and currencies to enhance returns. For longer maturity portfolios, it offers individual country indexes, active global bond management, and a currency/bond asset allocation strategy.

Andrew P. Smith is chief investment officer; David A. Goracy is client contact.

London Investment Advisors

7760 France Ave. S., Suite 730,
Minneapolis, Minn. 55435; (612)
831-6226

Total assets managed	$109,000,000
Total discretionary assets	$109,000,000
Discretionary tax-exempt	$108,000,000
International fixed-income assets	$4,000,000
Types of accounts managed	CEFU
Tax-exempt clients	20
Minimum separate account	$500,000
No. of portfolio managers	2

London Investment Advisors Inc. is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity philosophy, essentially, is long-term and value-oriented with an emphasis on current income.

Its fixed-income approach is fairly active interest rate anticipation, changing maturity lengths. It tends to rotate toward areas of relative value.

John Kelly is chief investment officer; Gregg Hedtke is client contact.

Longfellow Investment Management Co.

190 High St., Boston, Mass. 02110;
(617) 695-3504

Total assets managed	$97,000,000
Total discretionary assets	$97,000,000
Discretionary tax-exempt	$70,000,000
Types of accounts managed	CEGU
Tax-exempt clients	15
Minimum separate account	$2,000,000
No. of portfolio managers	2
Size of research staff	1

Longfellow Investment Management Co. is an active fixed-income and short-term manager.

Its fixed-income approach is based on short duration management. Portfolio average duration ranges from two to three years to limit interest rate risk. Value is added through sector/security selection.

John Ciarleglio III and David W. Seeley are chief investment officers and client contacts.

Loomis, Sayles & Co. Inc.

1 Financial Center, Boston, Mass.
02111; (617) 482-2450

Total assets managed	$29,084,000,000
Total discretionary assets	$21,479,000,000
Discretionary tax-exempt	$20,197,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	708
Minimum separate account	$1,000,000
No. of portfolio managers	57
Size of research staff	28

Loomis, Sayles & Co. Inc. is an active equity, active fixed-income and balanced manager.

Its equity and fixed-income approaches are decentralized in regional offices, resulting in a broad range of investment styles. Options are used.

Robert L. Kemp is chief investment officer; Ralph Sinsheimer is client contact.

Lord, Abbett & Co.

767 Fifth Ave., New York, N.Y. 10153;
(212) 848-1800

Total assets managed	$10,184,000,000
Discretionary tax-exempt	$3,228,000,000
Types of accounts managed	CEGU
Tax-exempt clients	27
Minimum separate equity account	$25,000,000
Minimum separate bond account	$10,000,000
No. of portfolio managers	11
Size of research staff	13

Lord, Abbett & Co. is an active equity, active fixed-income, balanced, active international equity and fixed-income, short-term, high-yield and convertible securities manager.

Its equity approach emphasizes securities with below average price-to-book ratios, below average price-earnings ratios and below average return on equity relative to corresponding ratios for the S&P 500.

Its fixed-income approach focuses on non-traditional management with emphasis on lower-rated and convertible issues.

John M. McCarthy is chief investment officer; Marilyn Fee White is client contact.

Lowe, Brockenbrough, Tierney & Tattersall

6630 W. Broad St., Richmond, Va.
23230; (804) 288-0404

Total assets managed	$2,914,000,000
Total discretionary assets	$2,914,000,000
Discretionary tax-exempt	$2,564,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	107
Minimum separate account	$5,000,000
No. of portfolio managers	14
Size of research staff	3

Lowe, Brockenbrough, Tierney & Tattersall is an active equity, active fixed-income and balanced manager.

Its equity approach uses industry concentration to add value and focuses on stocks with above-average risk to maximize returns while preserving capital. Sector rotation is used.

In fixed income, it emphasizes sector and maturity selection.

Thomas Tierney and Fred Tattersall are chief investment officers; Charles C. Field is client contact.

Lynch & Mayer Inc.

650 Fifth Ave., New York, N.Y. 10019;
(212) 246-7760

Total assets managed	$1,691,000,000
Total discretionary assets	$1,669,000,000
Discretionary tax-exempt	$876,000,000
401(k)/457 assets managed	$770,000
Types of accounts managed	CEFU
Minimum separate account	$10,000,000
No. of portfolio managers	8
Size of research staff	2

Lynch & Mayer Inc., an active equity and convertible securities manager, stresses growth stocks. Stock selection focuses on companies with a positive fundamental change and with a potential for a 50% stock price appreciation over an 18-month time horizon. Convertible securities portfolios also are managed.

Dennis P. Lynch is chief investment officer; W. Dinsman Zirkle is client contact.

M

MacKay-Shields Financial

9 W. 57th St., New York, N.Y. 10019;
(212) 230-3886

Total assets managed	$6,604,000,000
Total discretionary assets	$6,604,000,000
Discretionary tax-exempt	$5,297,000,000
International equity assets	$50,000,000
International fixed-income assets	$100,000,000
Euro convertible bonds	$25,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	64
No. of portfolio managers	16

MacKay-Shields Financial Corp. is an active domestic and international equity, active domestic and international fixed-income, balanced, short-term and convertible bond manager.

It offers two equity approaches: active growth emphasizes relative valuation and earnings and price momentum models; active value uses quantitative screens to identify low p/e stocks meeting specific operating and financial criteria.

Its fixed-income approach is disciplined and risk-controlled, using sector analysis and moderate duration adjustments. Enhanced index fund management is offered.

Christina Seix is chief investment officer; Krista M. Woodall is client contact.

MacKenzie Investment Management Inc.

1200 N. Federal Highway, Boca
Raton, Fla. 33432; (407) 393-8900

Total assets managed	$460,000,000
Total discretionary assets	$460,000,000
Discretionary tax-exempt	$165,000,000
Types of accounts managed	G
Tax-exempt clients	1
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	2

MacKenzie Investment Management Inc. is an active equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

Its theme-oriented equity approach uses growth stocks and emphasizes value. In fixed-income, it uses interest rate anticipation and purchases high-quality securities.

Michael G. Landry is chief investment officer; James Broadfoot is client contact.

Madison Investment Advisors

6411 Mineral Point Road, Madison,
Wis. 53705; (800)-767-0300

Total assets managed	$354,000,000
Total discretionary assets	$354,000,000
Discretionary tax-exempt	$272,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	82
Minimum separate account	$1,000,000
No. of portfolio managers	3

Madison Investment Advisors, an active fixed-income manager, uses a proprietary model to determine directions of interest rates; average maturity is kept at 10 years or less. Investments are in government/agency and investment-grade corporate securities. The firm is willing to dramatically shorten maturities to preserve capital when appropriate.

Frank Burgess is chief investment officer; Michael Schlageter and Richard Ford are client contacts.

Magten Asset Management

35 E. 21st St., New York, N.Y. 10010;
(212) 529-6600

Total assets managed	$510,000,000
Total discretionary assets	$510,000,000
Discretionary tax-exempt	$271,000,000
Types of accounts managed	CEFG
Tax-exempt clients	10
Minimum separate account	$10,000,000
No. of portfolio managers	3
Size of research staff	3

Magten Asset Management, a value bond manager, invests in diversified portfolios of lower tier, high-yield securities of issuers in weak financial condition or experiencing poor operating results, with special emphasis on bankruptcies and turnaround situations.

These investments include companies with substantial capital needs or negative net worth that are cyclically depressed or downgraded by the rating services.

Talton R. Embry is chief investment officer; Barbara Justiz is client contact.

Managed Investments Ltd.

555 Canada Trust Tower, 10104 103rd
Ave., Edmonton, Alberta T5J 0H8;
(403) 423-3544

Total assets managed	$400,000,000
Total discretionary assets	$400,000,000
Discretionary tax-exempt	$320,000,000
For subsidiaries of U.S. firms	$18,000,000
Non-North American equities	$30,000,000
Tax-exempt clients	23
U.S. subsidiaries	2
Types of accounts managed	CEFU
Minimum separate account	$250,000
No. of portfolio managers	5
Size of research staff	1

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THE CROSSING NETWORK

Managed Investments Ltd., a Canadian firm, is an active equity, active and passive fixed-income, balanced, active international equity and short-term manager.

Its equity approach uses fundamental value analysis to select a core portfolio of stable, growth stocks. The firm then rotates exposure to cyclical and resource attacks through the economic cycle.

Its fixed-income approach relies on continuous monitoring of significant economic data and interest rate forecasting to determine the optimum mix of maturities and issues.

Bruce Sansom is chief investment officer and client contact.

Management Asset Corp.

253 Post Road W., P.O. Box 5006,
Westport, Conn. 06881; (203)
226-4768

Total assets managed	$432,000,000
Total discretionary assets	$432,000,000
Discretionary tax-exempt assets	$376,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	11
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	2

Management Asset Corp., an active equity manager, uses a bottom-up stock picker approach with emphasis on sound financial condition, low price in relation to historical earnings and broad diversification. Its investment discipline is to be fully invested in stock when it sees value.

Leonard M. Heine Jr. is chief investment officer; Marc Magnoli is client contact.

Manning & Napier Advisors

1 East Ave., Rochester, N.Y. 14604;
(716) 325-6880

Total assets managed	$3,200,000,000
Total discretionary assets	$3,200,000,000
Discretionary tax-exempt	$2,800,000,000
Types of accounts managed	CEFGU
Minimum separate account	$500,000
Size of research staff	13

Manning & Napier Advisors Inc. is a balanced and short-term manager.

Its value-oriented equity approach uses low p/e stocks and Graham & Dodd analysis. It is based on specific equity selection strategies, using fixed-income securities as a valuation hurdle to earn superior risk-adjusted returns. Its fixed-income approach uses interest rate anticipation.

William Manning is chief investment officer; William J. Napier is client contact.

Manufacturers Hanover Trust Co.-Investment Management Group

270 Park Ave., New York, N.Y. 10017;
(212) 270-9278

Total assets managed	$10,006,000,000
Total discretionary assets	$10,006,000,000
Discretionary tax-exempt	$605,000,000
Types of accounts managed	CEF
Minimum separate account	$500,000
No. of portfolio managers	40
Size of research staff	14

Manufacturers Hanover Trust Co. — Investment Management Group is an active equity, active fixed-income, balanced, active international equity and fixed-income, short-term, options/futures and ADR manager.

Its equity approach is value-oriented, emphasizing fundamental analysis of earnings, asset values, cash flows and yields.

Its fixed-income approach is top-down. Market, maturity/duration and sector weightings are determined through interest rate and currency forecasts based on macroeconomic, inflation and monetary assumptions.

Henry Gooss is chief investment officer; T. James Taylor Jr. and Kathleen Furey are client contacts.

The Manufacturers Life Insurance Co.

200 Bloor St. E., Toronto, Ontario
M4W 1E5; (416) 926-6148

Total assets managed	$21,240,000,000
Total discretionary assets	$19,009,000,000
Discretionary tax-exempt	$2,751,000,000
401(k)/457 assets managed	$2,400,000,000
Mortgage assets OF	$550,000,0
Types of accounts managed	CFU
Minimum separate account	$40,000,000
No. of portfolio managers	7
Size of research staff	9

The Manufacturers Life Insurance Co. is an active domestic and international equity, active domestic and international fixed-income, balanced and short-term manager.

Using a bottom-up approach, its equity strategy is to identify companies with earnings growth rates greater than average and not reflected in market valuation. In fixed income, it employs interest rate anticipation, using fiscal and monetary macroeconomic analyses and flow of funds and yield curve analyses.

The figures above are for U.S. domiciled companies only.

George Neal is chief investment officer; Cindy Forbes is client contact.

Manufacturers National Bank of Detroit

100 Renaissance Tower, 8th Floor,
Detroit, Mich. 48243; (313)
222-5414

Total assets managed	$15,908,000,000
Total discretionary assets	$12,059,000,000
Discretionary tax-exempt	$5,747,000,000
Pooled accounts	$2,914,000,000
Separate accounts	$2,833,000,000
401(k)/457 assets managed	$680,000,000
Real estate equity assets	$27,000,000
Equity indexed assets	$4,014,000,000
Fixed-income indexed assets	$14,000,000
Tax-exempt clients	
Commingled	2,226
Separate	72
Types of accounts managed	CEFGU
Minimum separate account	$2,000,000
No. of portfolio managers	10
Size of research staff	7

Manufacturers National Bank of Detroit is an active and passive equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach emphasizes consistent growth with reasonable valuation. Its fixed-income approach emphasizes interest rate anticipation and sector analysis. Stock index futures are used in index funds.

For real estate, it uses real estate investment trusts and private deals.

Clinton P. Schloop is chief investment officer; James P. Sullivan is client contact.

Manufacturers & Traders Trust Co.

1 M&T Plaza, 9th Floor, Buffalo, N.Y.
14240; (716) 842-5230

Total assets managed	$4,400,000,000
Total discretionary assets	$800,000,000
Discretionary tax-exempt	$200,000,000
Pooled accounts	$60,000,000
Separate accounts	$140,000,000
401(k)/457 assets managed	$10,000,000
Tax-exempt clients	
Commingled	30
Separate	70
Types of accounts managed	CEFU
Minimum separate account	$500,000
No. of portfolio managers	7
Size of research staff	2

Manufacturers & Traders Trust Co. is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach is core-diversified, focusing on low p/e stocks. Its infixed-income approach uses indexing.

William Graburn is chief investment officer; James Ferguson is client contact.

ManuVest

250 Bloor St. E., Toronto, Ontario
M4W 1E5; (416) 926-5550

Total assets managed	$1,024,000,000
Total discretionary assets	$1,024,000,000
Discretionary tax-exempt	$1,024,000,000
For subsidiaries of U.S. firms	$150,000,000
Mortgage assets	$45,000,000
Non-North American equities	$26,000,000
Tax-exempt clients	208
U.S. subsidiaries	10
Types of accounts managed	CEFGU
Minimum separate account	$10,000,000
No. of portfolio managers	7

ManuVest, a Canadian firm formerly ManuLife Investment Management Corp., is an active equity, active fixed-income, balanced, active international equity and short-term manager.

Its active, top-down equity approach is driven by earnings momentum. Its active fixed-income approach is risk-averse.

George E. Neal is chief investment officer; Norman R. Kerr is client contact.

Marathon Asset Management Co. Inc.

1250 Prospect St., P.O. Box 9117, La
Jolla, Calif. 92038; (619) 456-8033

Total assets managed	$135,000,000
Total discretionary assets	$135,000,000
Discretionary tax-exempt	$133,000,000
Types of accounts managed	CEF
Tax-exempt clients	22
Minimum separate account	$1,000,000
No. of portfolio managers	3

Marathon Asset Management Co. Inc. is an active equity, active fixed-income and short-term manager.

Its primary equity approach is quantitative, value-oriented and risk-averse, focusing on stocks with strong earnings momentum and low p/e. There are strict loss-control disciplines.

Its fixed-income approach is quantitative, with maturities determined by a proprietary formula weighing monetary, economic and market conditions.

Thomas J. Feeney is chief investment officer; Kathleen A. Feeney is client contact.

Marine Bank

901 State St., Erie, Pa. 16501; (814)
871-9200

Total assets managed	$1,233,000,000
Total discretionary assets	$943,000,000
Discretionary tax-exempt	$425,000,000
Pooled accounts	$204,000,000
Separate accounts	$221,000,000
401(k)/457 assets managed	$26,000,000
International equity assets	$15,000,000
Equity indexed assets	$1,000,000
Types of accounts managed	CEFG
No. of portfolio managers	5

Marine Bank is an active and passive equity, active fixed-income, balanced, active international/global equity and short-term manager.

Its primary equity approach is value-oriented, emphasizing low p/e stocks. Equity purchase candidates are from the fourth and fifth quintile.

Its primary fixed-income approach uses sector analysis; movement between various sectors is based on relative yield spreads.

Wayne M. Koble is chief investment officer; Sean P. Hagerty is client contact.

Marine Investment Management Co.

3 S. Old State Capitol Plaza,
Springfield, Ill. 62701; (217)
753-0300

Total assets managed	$614,000,000
Total discretionary assets	$570,000,000
Discretionary tax-exempt	$495,000,000
401(k)/457 assets managed	$1,000,000
Types of accounts managed	CFG
Tax-exempt clients	22
Minimum separate account	$3,000,000
No. of portfolio managers	3
Size of research staff	2

Marine Investment Management Co. is an active equity, active fixed-income and balanced manager.

Its equity approach is contrarian, emphasizing Graham & Dodd analysis. It actively seeks undervalued companies with sound financial structure and underlying asset value, sound management, manageable debt, and a growing stream of dividends.

Its fixed-income approach relies on interest rate anticipation, analyzing the economic environment to position portfolios for maturity.

George R. Humm is chief investment officer; J. Michael Houston is client contact.

Marinvest

250 Park Ave., New York, N.Y. 10177;
(212) 503-6775

Total assets managed	$3,564,000,000
Total discretionary assets	$3,564,000,000
Discretionary tax-exempt	$935,000,000
401(k)/457 assets managed	$84,000,000
Types of accounts managed	CFU
Tax-exempt clients	777
Minimum separate equity account	$5,000,000
Minimum separate bond account	$20,000,000
No. of portfolio managers	8
Size of research staff	8

Marinvest is an active equity, active fixed-income, balanced, short-term and mutual funds manager.

Its value-oriented equity approach uses a combination of value screens and internal, fundamental analysis to identify securities that appear undervalued relative to their industry and the overall market.

Its fixed-income approach involves interest rate anticipation, sector analysis and duration and convexity management. Value is added through a three-step process: duration targeting, maturity structuring and spread analysis.

Wayne Wong and Leo Grohowski are chief investment officers; Kenneth W. Ostrowski is client contact.

Markston Investment Management

633 Third Ave., 17th Floor, New York,
N.Y. 10017; (212) 972-3120

Total assets managed	$440,000,000
Total discretionary assets	$440,000,000
Discretionary tax-exempt	$360,000,000
401(k)/457 assets managed	$14,000,000
Types of accounts managed	C
Tax-exempt clients	3
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	3

Markston Investment Management, an active equity manager, targets soundly profitable businesses run by good management selling at bargain prices.

John R. Stone is chief investment officer and client contact.

Marlborough Capital Advisors Inc.

399 Boylston St., Boston, Mass
02116; (617) 578-1722

Total assets managed	$135,000,000
Total discretionary assets	$135,000,000
Discretionary tax-exempt	$40,000,000
Types of accounts managed	CGU
Tax-exempt clients	1
Minimum separate account	$50,000,000
No. of portfolio managers	2

Marlborough Capital Advisors Inc. is a mezzanine financings and limited partnerships manager.

The firm actively manages private and negotiated mezzanine financings and participates in venture capital and leveraged buy-out limited partnerships.

Margaret L. Lanoix is chief investment officer; Ms. Lanoix and Gayle M. Slattery are client contacts.

Marquette Bank Minneapolis Trust Department

Sixth & Marquette, Minneapolis, Minn.
55480; (612) 341-5677

Total assets managed	$594,000,000
Total discretionary assets	$314,000,000
Discretionary tax-exempt	$148,000,000
Types of accounts managed	CEG
No. of portfolio managers	2
Size of research staff	1

Marquette Bank Minneapolis Trust Department is an active equity, active fixed-income and balanced manager.

Its equity approach is value oriented, using Graham & Dodd analysis and low p/e stocks. Its fixed-income approach combines laddered maturities, the timing of purchases and sector selection to improve on investment return.

Harvey R. Peck is chief investment officer.

Marsh & Cunningham Inc.

1 Liberty Square, P.O. Box 1961,
Boston, Mass. 02105; (617)
482-0290

Total assets managed	$145,000,000
Total discretionary assets	$145,000,000
Discretionary tax-exempt	$27,000,000
Types of accounts managed	CEF
Tax-exempt clients	13
Minimum separate account	$1,000,000
No. of portfolio managers	2

Marsh & Cunningham Inc. is a balanced manager.

Its equity approach is value-oriented, using Graham & Dodd analysis and low p/e stocks. Its fixed-income approach uses interest rate anticipation.

John B. Marsh is chief investment officer and is client contact.

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[illegible] Los Angeles, California [illegible]
Telephone [illegible]

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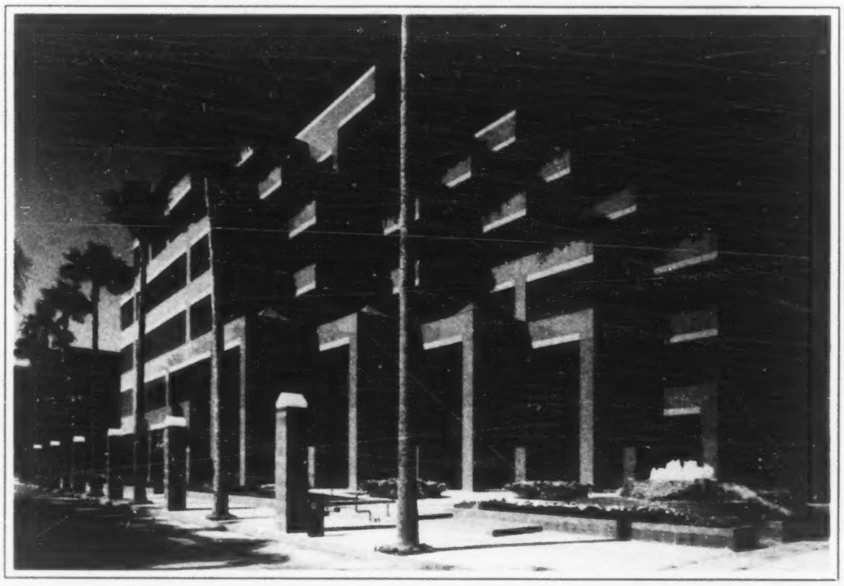

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Marsh & Cunningham-Castegren International

1 Liberty Square, P.O. Box 1961,
Boston, Mass. 02105; (617)
482-0290

Total assets managed	$573,000,000
Total discretionary assets	$573,000,000
Discretionary tax-exempt	$458,000,000
International equity assets	$440,000,000
International cash assets	18,000,000
Types of accounts managed	C
Tax-exempt clients	6
Minimum separate account	$40,000,000
No. of portfolio managers	1

Marsh & Cunningham — Castegren International, an active international/global equity manager, uses top-down country allocation and bottom-up stock selection. Low p/e stocks are identified using a 950-stock data base.

Hakan Castegren is chief investment officer and client contact.

J.D. Martin & Co.

1300 Free Press Building, Detroit,
Mich. 48226; (313) 961-1117

Total assets managed	$121,000,000
Total discretionary assets	$121,000,000
Discretionary tax-exempt	$121,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	43
Minimum separate account	$250,000
No. of portfolio managers	3
Size of research staff	2

J.D. Martin & Co. is an active equity, active fixed-income and balanced manager.

Its equity approach emphasizes consistent and predictable growth of earnings and dividends, equally weighted, using proprietary valuation methodology. Its fixed-income approach uses sector analysis with emphasis in the corporate sector and interest rate anticipation. Weight is placed on stability or low volatility of principal.

James D. Martin is chief investment officer; L. Lloyd Utterback is client contact.

Martingale Asset Management

12 Marshall St., Boston, Mass. 02108;
(617) 720-1334

Total assets managed	$60,000,000
Total discretionary assets	$60,000,000
Discretionary tax-exempt	$60,000,000
Types of accounts managed	CFU
Minimum separate account	$10,000,000
No. of portfolio managers	3

Martingale Asset Management is an active equity, structured equity and hedged equity manager.

The firm is value-oriented and uses quantitative techniques. Both long only and systematically hedged (long and short) equity accounts are managed. The investment process combines a proprietary stock selection model and portfolio construction. Consistency of high expected returns relative to the client's benchmark is stressed.

William E. Jacques is chief investent officer; Arnold S. Wood is client contact.

Marvin & Palmer Associates

1 Commerce Center, 12th and
Orange, Suite 1100, Wilmington,
Del. 19801; (302) 573-3570

Total assets managed	$276,000,000
Total discretionary assets	$276,000,000
Discretionary tax-exempt	$265,000,000
International equity assets	$211,000,000
Types of accounts managed	CEF
Tax-exempt clients	16
Minimum separate account	$25,000,000
No. of portfolio managers	3
Size of research staff	4

Marvin & Palmer Associates Inc., an active domestic and international equity manager, combines fundamental and technical research, treating currency as a separate asset category.

David F. Marvin is chief investment officer; Jon A. Stiklorius is client contact.

Massachusetts Financial Services

500 Boylston St., Boston, Mass.
02116; (617) 954-5757

Total assets managed	$25,896,000,000
Total discretionary assets	$25,430,000,000
Discretionary tax-exempt	$2,118,000,000
401(k)/457 assets managed	$22,000,000
International fixed-income assets	$160,000,000
Types of accounts managed	CEFG
Tax-exempt clients	24
Minimum separate account	$20,000,000
No. of portfolio managers	32
Size of research staff	25

Massachusetts Financial Services is an active equity, active fixed-income, balanced, active international/global fixed-income and short-term manager.

Its equity approach emphasizes growth stock. Security selection is based on a combination of fundamental analysis to determine prospective earnings momentum and technical screens for market price momentum. It heavily weights industries and is broadly diversified among individual holdings.

In fixed income, yield curve and fundamental analysis is used to determine maturity structure. Sector analysis and swapping are used to add incremental value.

A. Keith Brodkin is chief investment officer; James H. Kelly and Eileen M. McCaffery are client contacts.

Massachusetts Mutual Life Insurance Co.

1295 State St., Springfield, Mass.
01111; (413) 788-8411

Total assets managed	$23,265,000,000
Total discretionary assets	$23,265,000,000
Discretionary tax-exempt	$12,467,000,000
Pooled accounts	$1,437,000,000
Separate accounts	$302,000,000
GICs	$4,173,000,000
Annuities	$1,891,000,000
Other	$4,664,000,000
401(k)/457 assets managed	$4,800,000,000
Equity real estate assets	$170,000,000
Mortgage assets	$3,658,000,000
Tax-exempt clients:	
Pooled	2,292
Separate	9
Types of accounts managed	CEGU
Minimum separate account	$5,000,000
No. of portfolio managers	17
Size of research staff	21

Massachusetts Mutual Life Insurance Co. is an active equity, active fixed-income, balanced, real estate and short-term manager.

Its equity approach emphasizes low p/e stocks and yield, identifying financially strong companies with a history of dividend growth purchased at discounted valuation levels. Its fixed-income approach is based on sector analysis.

The real estate approach emphasizes well-diversified portfolios with a balance between cash and price appreciation.

Richard G. Dooley is chief investment officer; Peter J. Vogan is client contact.

Mathers & Co. Inc.

100 Corporate North, Suite 201,
Bannockburn, Ill. 60015; (708)
295-7400

Total assets managed	$824,000,000
Total discretionary assets	$824,000,000
Discretionary tax-exempt	$642,000,000
Types of accounts managed	CF
Tax-exempt clients	12
Minimum separate account	$5,000,000
No. of portfolio managers	4

Mathers & Co. Inc. is an active equity and balanced manager.

Its equity approach emphasizes bottom-up issue selection based on underlying fundamental value and the existence of special-situation characteristics. Its fixed-income approach is oriented toward analysis of interest rates, equities and the overall economic outlook.

Henry G. Van der Eb is chief investment officer; Daniel P. Abercrombie is client contact.

Matrix Capital Management

1 Greenwich Plaza, Greenwich, Conn.
06830; (203) 629-4400

Total assets managed	$758,000,000
Total discretionary assets	$758,000,000
Discretionary tax-exempt	$758,000,000
Types of accounts managed	CU
Tax-exempt clients	13
Minimum separate account	$10,000,000
No. of portfolio managers	7

Matrix Capital Management is an active and passive equity, passive fixed-income and tactical asset allocation manager.

Its investment approach is quantitative, emphasizing sector rotation. Fixed-income futures are used.

Michael A. Petrino is chief investment officer; Mary Ann Boyle is client contact.

McBryan Malone & Russell

Park Road Plaza, Box 144A, Road 11,
Reading, Pa. 19607; (215) 777-8110

Total assets managed	$82,000,000
Total discretionary assets	$82,000,000
Discretionary tax-exempt	$61,000,000
401(k)/457 assets managed	$6,000,000
Types of accounts managed	CEFG
Tax-exempt clients	74
Minimum separate account	$100,000
No. of portfolio managers	4

McBryan Malone & Russell Inc. is an active equity, short-term and option writing manager.

Its equity approach focuses on option writing and hedging. Stocks are selected that are unlikely to decline in value, have good financial characteristics and are selling at a fair value. Once a stock is bought, the firm sells call options. Options are used.

Donald J. McBryan is chief investment officer; M. Kevin Malone is client contact.

E.J. McConnell & Associates

P.O. Box 25, Suite 2600, Royal Bank
Plaza North Tower, Toronto, Ontario
M5J 2J1; (416) 366-5871

Total assets managed	$2,700,000,000
Total discretionary assets	$2,700,000,000
Discretionary tax-exempt	$2,200,000,000
For subsidiaries of U.S. firms	$431,000,000
Non-North American equities	$100,000,000
Tax-exempt clients	115
U.S. subsidiaries	14
Types of accounts managed	CEFGU
Minimum separate account	$10,000,000
No. of portfolio managers	5
Size of research staff	4

E.J. McConnell & Associates Ltd., a Canadian firm, is an active equity, active fixed-income, balanced, active international equity and short-term manager.

In equities, industry group selection is of primary importance. The firm uses growth and emerging growth stocks and Graham & Dodd analysis.

In fixed income, the firm operates a three-part strategy comprising a core component, a smaller interest rate anticipation and a trading component that uses sector analysis and spread trading opportunities.

E.J. McConnell is chief investment officer; Barbara Bucys is client contact.

McCowan Associates Inc.

125 E. 38th St., New York, N.Y.
10016; (212) 545-8700

Total assets managed	$1,437,000,000
Total discretionary assets	$1,437,000,000
Discretionary tax-exempt	$1,187,000,000
International equity assets	$18,000,000
Types of accounts managed	CEFG
Tax-exempt clients	19
Minimum separate account	$10,000,000
No. of portfolio managers	5
Size of research staff	4

McCowan Associates Inc. is an active equity, active fixed-income and balanced manager.

Its equity research focuses on small and midsize growth companies with sustainable, above-average earnings growth and profitability. General equity portfolios have 40% of investments in this category; special equity portfolios are dedicated solely to these smaller-cap companies. Its fixed-income approach is based on interest rate anticipation.

Bruce J. McCowan is chief investment officer; Anne G. Werner is client contact.

McCullough, Andrews & Cappiello Inc.

101 California St., Suite 4250, San
Francisco, Calif. 94111; (415)
956-8700

Total assets managed	$1,000,000,000
Total discretionary assets	$1,000,000,000
Discretionary tax-exempt	$750,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	83
Minimum separate account	$1,000,000
No. of portfolio managers	5
Size of research staff	4

McCullough, Andrews & Cappiello Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach is based on maintenance of buying power through growth of earnings and dividends on relatively low p/e values purchased on a timely basis at the lower end of their relative trading ranges.

Its fixed-income approach uses interest rate anticipation with an emphasis on liquidity and quality. Identification of major trends is paramount.

Robert F. McCullough is chief investment officer; Julie Balmes is client contact.

McGlinn Capital Management Inc.

850 N. Wyomissing Blvd., P.O. Box
6158, Wyomissing, Pa. 19610-6158;
(215) 374-5125

Total assets managed	$2,400,000,000
Total discretionary assets	$2,400,000,000
Discretionary tax-exempt	$2,040,000,000
401(k)/457 assets managed	$28,000,000
Dedicated/immunized assets	$640,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	82
Minimum separate account	$10,000,000
No. of portfolio managers	6

McGlinn Capital Management Inc. is an active and passive equity, active and passive fixed-income and balanced manager.

Its top-down equity approach combines low p/e stocks, Graham & Dodd analysis, sector rotation, market timing and quantitative analysis.

Its fixed-income approach focuses on interest rate direction and the posture of the Federal Reserve Board. Portfolios are concentrated in intermediate-term government and high-quality corporate issues.

Terrence J. McGlinn is chief investment officer; James A. Walker is client contact.

C.S. McKee & Co. Inc.

1 Gateway Center, Pittsburgh, Pa.
15222; (412) 566-1234

Total assets managed	$1,300,000,000
Total discretionary assets	$1,300,000,000
Discretionary tax-exempt	$1,300,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	86
Minimum separate account	$2,000,000
No. of portfolio managers	7

C.S. McKee & Co. Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is risk-averse and opportunistic, emphasizing a bottom-up style. For risk avoidance, it uses broad diversification and periodic reduction of exposure by raising cash. In its opportunistic approach, it stresses value-oriented selection, including low p/e, increased earnings and high return on earnings.

Its fixed-income approach is risk-averse and opportunistic. Identifying interest rate direction is essential to protect and enhance capital. Sector and quality shifts enhance return potential; investments are A or better.

Charles E. Jacobs is chief investment officer and client contact.

McMillion/Eubanks Capital Management Inc.

P.O. Box 21447, Greensboro, N.C.
27420; (919) 274-4876

Total assets managed	$144,000,000
Total discretionary assets	$144,000,000
Discretionary tax-exempt	$69,000,000
401(k)/457 assets managed	$4,000,000
Types of accounts managed	CEFU
Tax-exempt clients	31
Minimum separate account	$1,000,000
No. of portfolio managers	5
Size of research staff	2

McMillion/Eubanks Capital Management Inc. is an active equity, active fixed-income and balanced manager.

Its top-down investment approach uses economic, fundamental and technical resources to identify emerging secular trends. Monetary, fiscal and trade policies are analyzed to pinpoint developing themes and sectors. Proprietary earnings momentum and valuation screens aid in identifying undervalued issues. Options are used.

P. Lawrence Wingate is chief investment officer; William B. Carr is client contact.

Firms assigning assets to other managers

($ millions)

Firm	External*	Tax-exempt assets Internal	Total
Collins Associates	40,000	0	40,000
Morgan Stanley Asset	10,203	13,630	23,833
Common Fund	10,000	0	10,000
Prudential Diversified Investment	9,379	0	9,379
Frank Russell Trust	9,300	0	9,300
Vanguard Group	7,343	5,537	12,880
Strategic Investment Partners	4,141	20	4,161
AMR Investment Services	4,136	411	4,547
N.M. Rothschild Int'l	2,401	473	2,874
Laughlin Group	1,650	0	1,650
Indiana Investment	1,320	1,950	3,270
RCB Int'l	1,152	0	1,152
Lehndorff & Babson	1,104	781	1,885
Capital Trust	900	0	900
Darien Capital	900	0	900
Lincoln National Investment	819	8,273	9,092
Nationwide Life	686	5,552	6,238
Rampart Investment	500	0	500
Trust Advisory Group	440	0	440
Connecticut Mutual Life	348	3,352	3,700
Pension Portfolio Advisors	342	0	342
RSSI	261	362	623
FX Concepts	250	0	250
State Mutual	128	3,722	3,850
Provident Mutual	109	796	905
MONY	98	6,912	7,010
Wilmington Trust	67	1,134	1,201
AFL-CIO Housing/Building	60	287	347
Bank One Dayton	50	100	150
Strategic Commodity Systems	32	6	38
Shinnecock Partners	5	0	5
Eager Street Asset	2	7	9
Emprise Bank	2	33	35
Total	**108,128**	**53,338**	**161,466**

*Assets assigned to other managers

McMorgan & Co.

201 Spear St., Suite 1700, San
Francisco, Calif. 94105; (415)
777-9300

Total assets managed	$7,300,000,000
Total discretionary assets	$7,300,000,000
Discretionary tax-exempt	$7,300,000,000
Equity real estate assets	$500,000,000
Mortgage assets	$1,100,000,000
Types of accounts managed	U
Tax-exempt clients	127
Minimum separate account	$10,000,000
No. of portfolio managers	9

McMorgan & Co. is an active equity, active fixed-income, balanced, real estate and short-term cash manager.

Its equity investment philosophy is to invest in high-quality securities that have longer-term attraction without exposure to substantial risk.

The fixed-income philosophy is fundamentally based, carefully controlling aggregate portfolio risk through duration monitoring and control.

Thomas A. Morton is chief investment officer; William O. Sumner is client contact.

John McStay Investment Counsel

5949 Sherry Lane, Suite 1560, Dallas,
Texas 75225; (214) 360-1400

Total assets managed	$485,000,000
Total discretionary assets	$485,000,000
Discretionary tax-exempt	$485,000,000
Types of accounts managed	CEF
Tax-exempt clients	16
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	4

John McStay Investment Counsel is an active equity and balanced manager.

Its equity approach is rotational and theme oriented. Fundamental research focuses on companies with relative price and earnings momentum. Core portfolios reflect growth characteristics and a blend of medium and large companies. Small-cap portfolios are managed similarly.

Its fixed-income approach is risk-averse and oriented toward cash flow and volatility requirements. Convertible debentures are used.

John McStay is chief investment officer; Tricia Hundley is client contact.

R. Meeder & Associates

6000 Memorial Drive, Dublin, Ohio
43017; (614) 766-7000

Total assets managed	$495,000,000
Total discretionary assets	$495,000,000
Discretionary tax-exempt	$475,000,000
Equity indexed assets	$12,000,000
Types of accounts managed	CEFU
Tax-exempt clients	175
Minimum separate account	$3,000,000
No. of portfolio managers	7

R. Meeder & Associates is an active and passive equity, active fixed-income, tactical asset allocation, balanced and short-term manager.

Its equity philosophy is based on capital preservation; tactical asset allocation disciplines are implemented through a clearly defined decision process.

Its fixed-income approach is based on active maturity management implemented through an objective and quantitative decision process that maximizes the predictability of returns.

Robert Meeder Sr. and Philip Voelker are chief investment officers; Robert Baker and Harry Haynes are client contacts.

Mellon Bond Associates

1 Mellon Bank Center, Pittsburgh, Pa.
15258; (412) 234-3602

Total assets managed	$17,693,000,000
Total discretionary assets	$17,693,000,000
Discretionary tax-exempt	$17,581,000,000
Fixed-income indexed assets	$6,658,000,000
Dedicated/immunized assets	$1,714,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	87
Minimum separate account	$5,000,000
No. of portfolio managers	14
Size of research staff	4

Mellon Bond Associates is an active and passive fixed-income and short-term manager.

The firm establishes a performance benchmark for each actively managed account, followed by strict control of duration, yield, income and cash flow structure. Value is added by sector/quality spread valuation and issue selection.

Paul R. McCann is chief investment officer; William F. Adam is client contact.

Mellon Capital Management

595 Market St., Suite 2900, San
Francisco, Calif. 94105; (415)
546-6056

Total assets managed	$27,310,000,000
Total discretionary assets	$27,310,000,000
Discretionary tax-exempt	$27,310,000,000
International equity assets	$630,000,000
Equity indexed assets	$23,365,000,000
Fixed-income indexed assets	$3,315,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	139
No. of portfolio managers	11
Size of research staff	4

Mellon Capital Management Inc. is a passive equity, passive fixed-income, balanced, tactical asset allocation and a passive international/global equity manager.

Quantitative methods are used, as are options and financial futures.

William L. Fouse is chief investment officer; Cary Martin Zellerbach is client contact.

Mellon Equity Associates

500 Grant St., Suite 4100, Pittsburgh,
Pa. 15258; (412) 234-1394

Total assets managed	$3,959,000,000
Total discretionary assets	$3,959,000,000
Discretionary tax-exempt	$3,959,000,000
401(k)/457 assets managed	$283,000,000
Types of accounts managed	CEFG
Tax-exempt clients	45
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	7

Mellon Equity Associates is an active equity and balanced manager.

Its equity approach is quantitative, with disciplined security valuation and portfolio construction processes designed to maximize expected return per unit risk taken. Stock index and fixed-income futures are used.

Francis T. Stack is client contact.

International advisers: June 25

Mellon/McMahan Real Estate Advisors Inc.

444 Market St., Suite 2100, San
Francisco, Calif. 94111; (415)
433-7770

Total assets managed	$1,060,000,000
Total discretionary assets	$1,060,000,000
Discretionary tax-exempt	$907,000,000
Equity real estate assets	$580,000,000
Mortgage assets	$327,000,000
Types of accounts managed	CG
Tax-exempt clients	15
Minimum separate account	$50,000,000
No. of portfolio managers	10
Size of research staff	2

Mellon/McMahan Real Estate Advisors Inc. is a real estate manager.

Its approach is to acquire high-quality, operating retail, office and industrial properties in growth corridors of major metropolitan areas throughout the United States. The firm adds value through "hands-on" property management. Dispositions are reviewed annually and sale is strategically timed to coincide with favorable market conditions.

Thomas C. Clark is chief investment officer; Barry Rilliet is client contact.

Mellon-Pictet International Management Ltd.

Cutlers Garden, 5 Devonshire Square,
London, EC2M 4LD, U.K.;
01-283-7471

Total assets managed	$1,003,000,000
Total discretionary assets	$1,003,000,000
Discretionary tax-exempt	$677,000,000
International equity assets	$677,000,000
Types of accounts managed	CEF
Tax-exempt clients	14
Minimum separate account	$10,000,000
No. of portfolio managers	8
Size of research staff	30

Mellon-Pictet International Management Ltd. is an active international/global positive value manager.

Its equity approach is a systematic disciplined technique linking share value to fundamentals. It identifies shares representing the best value relative to historical valuation within each market. Country weighting is constrained to that of the index.

Dan Blanks is chief investment officer; Rod Hearn in London and Steve Albrecht in Boston at (508) 238-1529 are client contacts.

L.J. Melody & Co.

5847 San Felipe, Suite 4400, Houston,
Texas 77057; (713) 787-1900

Total assets managed	$2,100,000,000
Total discretionary assets	$900,000,000
Discretionary tax-exempt	$900,000,000
Equity real estate assets	$549,000,000
Mortgage assets	$351,000,000
Tax-exempt clients	4
Minimum separate account	$50,000,000

L.J. Melody & Co., a real estate manager, acquires and manages hybrid debt and equity real estate investments nationwide through separate account relationships.

Lawrence J. Melody is chief investment officer; Robert D. Barkley is client contact.

Mercantile Bank of St. Louis

P.O. Box 387, St. Louis, Mo. 63166;
(314) 425-2622

Total assets managed	$7,700,000,000
Total discretionary assets	$4,300,000,000
Discretionary tax-exempt	$587,000,000
Pooled accounts	$102,000,000
Separate accounts	$485,000,000
401(k)/457 assets managed	$213,000,000
Tax-exempt clients	
Commingled	279
Separate	112
Types of accounts managed	CEFGU
No. of portfolio managers	2
Size of research staff	7

Mercantile Bank of St. Louis is an active and passive equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach is quantitative. Fundamental research is employed using a valuation model and screens comparing historical relative price to book ratios, a dividend discount model, estimated total earnings over one and three years based on projected corporate earnings and relative p/es.

Its primary fixed-income approach provides enhanced value and sector allocation based on quantitative spread analysis as well as internal credit research.

John H. Blixen II is chief investment officer; Everett J. Kalkbrenner is client contact.

Mercantile National Bank of Indiana

5243 Hohman Ave., Hammond, Ind.
46320; (219) 932-8220

Total assets managed	$373,000,000
Total discretionary assets	$151,000,000
Discretionary tax-exempt	$68,000,000
Pooled accounts	$11,000,000
Separate accounts	$57,000,000
Tax-exempt clients:	
Commingled	88
Separate	26
Types of accounts managed	CEFGU
Minimum separate account	$500,000
No. of portfolio managers	1

Mercantile National Bank of Indiana is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach is value-oriented; fundamental analysis aids in identifying undervalued securities. Its fixed-income approach uses sector analysis.

Edward A. Studzinski is chief investment officer; Gary M. Wilbert is client contact.

Mercantile-Safe Deposit & Trust Co.

P.O. Box 2257, Baltimore, Md. 21203;
(301) 237-5548

Total assets managed	$7,202,000,000
Total discretionary assets	$7,202,000,000
Discretionary tax-exempt	$3,301,000,000
Pooled accounts	$942,000,000
Separate accounts	$2,359,000,000
International fixed-income assets	$20,000,000
Dedicated/immunized assets	$10,000,000
Types of accounts managed	CEFGU
Minimum separate account	$2,000,000
No. of portfolio managers	9
Size of research staff	8

Mercantile-Safe Deposit & Trust Co. is an active equity, active and passive fixed-income, balanced, active international global fixed-income and short-term manager.

Its equity approach is value-oriented and focuses on high-yield, low p/e securities. Emphasis is placed on the buy/sell discipline.

Its risk-control fixed-income approach combines interest rate anticipation and quantitative analysis to achieve specific client objectives.

James D. Hardesty is chief investment officer; John Wetzelberger III is client contact.

Mercator Asset Management

2400 E. Commercial Blvd., Fort
Lauderdale, Fla. 33308; (305)
771-9660

Total assets managed	$800,000,000
Discretionary tax-exempt	$700,000,000
Types of accounts managed	CE
Minimum separate account	$10,000,000
No. of portfolio managers	3

Mercator Asset Management, an equity manager, takes a value approach focusing on low p/e stocks.

Michael Williams is client contact.

The Merchants Bank

1125 Grand Ave., Kansas City, Mo.
64106; (816) 556-8082

Total assets managed	$426,000,000
Total discretionary assets	$426,000,000
Discretionary tax-exempt	$155,000,000
Separate accounts	$155,000,000
401(k)/457 assets managed	$5,000,000
Tax-exempt clients	142
Types of accounts managed	CEFGU
Minimum separate account	$500,000
No. of portfolio managers	2

The Merchants Bank is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach is a value, low p/e, high dividend style that is somewhat contrarian. Emphasis is on growth in dividends and earnings, strong balance sheets and return on equity. Its primary fixed-income approach is passive, focusing on interest rate anticipation and sector analysis.

W. Patrick Sterner is chief investment officer and client contact.

Merchants Investment Counseling Inc.

1 Merchants Plaza, Suite 635E,
Indianapolis, Ind. 46255; (317)
267-3731

Total assets managed	$3,065,000,000
Total discretionary assets	$3,065,000,000
Discretionary tax-exempt	$1,433,000,000
401(k)/457 assets managed	$12,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	65
Minimum separate account	$1,000,000
No. of portfolio managers	9
Size of research staff	3

Merchants Investment Counseling Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach has a bottom-up focus that emphasizes accelerating and consistent earnings using qualitative and valuation standards.

Its fixed-income approach emphasizes active duration management and total return, using market cycle valuation analysis. At times, portfolios may seek high income and price stability.

Michael J. Burgad is chief investment officer; Susan S. Thomas is client contact.

Merchants National Bank

200 E. Jackson St., Muncie, Ind.
47305; (317) 747-1362

Total assets managed	$691,000,000
Total discretionary assets	$691,000,000
Discretionary tax-exempt	$300,000,000
Pooled accounts	$7,000,000
Separate accounts	$293,000,000
401(k)/457 assets managed	$6,000,000
Tax-exempt clients:	
Commingled	50
Separate	225
Types of accounts managed	CEF
Minimum separate account	$250,000
No. of portfolio managers	3
Size of research staff	1

Merchants National Bank is an active and passive domestic equity and fixed-income, balanced, passive international equity and fixed-income, and short-term manager.

Its equity approach focuses on high-quality, large-cap, blue-chip growth stocks. Its fixed-income approach uses sector analysis, emphasizing high-quality short/intermediate-term issues.

Mark A. Collison is chief investment officer; Mr. Collison and Gary Bartlett are client contacts.

Merchants National Bank

222 Second Ave. S.E., Cedar Rapids,
Iowa 52401; (319) 368-4625

Total assets managed	$1,781,000,000
Total discretionary assets	$283,000,000
Discretionary tax-exempt	$87,000,000
Separate accounts	$87,000,000
Tax-exempt clients	52
Types of accounts managed	CEFU
No. of portfolio managers	3

Merchants National Bank is an active and passive equity, active fixed-income, balanced, active international equity and short-term manager.

Its equity approach uses common stocks selling at low relative p/es within their market sectors, investing in undervalued equities that are selling at a discount and possess special investment characteristics. For fixed income, the firm uses systematic laddering of short- to intermediate-term high-grade securities, focusing on the most attractive area of the yield curve.

Dennis R. Haines is chief investment officer; Carrol Griggs and Jeff Kaiden are client contacts.

Merganser Capital Management Corp.

1 Cambridge Center, Cambridge,
Mass. 02142; (617) 494-1000

Total assets managed	$1,735,000,000
Total discretionary assets	$1,735,000,000
Discretionary tax-exempt	$1,703,000,000
401(k)/457 assets managed	$271,000,000
Types of accounts managed	CFG
Tax-exempt clients	11
Minimum separate account	$10,000,000
No. of portfolio managers	2
Size of research staff	2

Merganser Capital Management Corp., an active fixed-income and short- to intermediate-term manager, emphasizes capital preservation. Value is added by investing in sectors and securities that offer attractive returns compared with U.S. government securities on a yield-to-maturity basis.

Edward M. Safran is chief investment officer; James Wakefield is client contact.

Meridian Capital Management Ltd.

450 B St., Suite 780, San Diego, Calif.
92101; (619) 239-9049

Total assets managed	$60,000,000
Tax-exempt assets managed	$21,000,000
International equity assets	$2,000,000
International fixed income assets	$2,000,000
Types of accounts managed	CF
Tax-exempt clients	35
Minimum separate account	$300,000
No. of portfolio managers	2

Meridian Capital Management Ltd. is an active equity, passive international, balanced and short-term manager.

Its investment approach uses active asset allocation incorporating equities, fixed income and cash equivalents. Its equity approach concentrates on value-oriented growth companies with superior appreciation potential. Its fixed-income approach is passive, using primarily short- to medium-duration Treasuries, investment-grade corporates and foreign securities.

Ellis Smith and John Messer are chief investment officers.

Meridian Investment Co.

P.O. Box 2000, Valley Forge, Pa.
19482; (215) 251-7955

Total assets managed	$1,723,000,000
Total discretionary assets	$1,723,000,000
Discretionary tax-exempt	$1,247,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	57
Minimum separate account	$10,000,000
No. of portfolio managers	10

Meridian Investment Co. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach uses a proprietary value-growth-momentum model that screens 2,500 stocks to provide highly diversified portfolios, matching the S&P 500 profile with market beta and lower volatility. The process is not subjected to growth or value cycles of market and follows a highly disciplined buy/sell policy.

Its fixed-income approach is based upon the exploitation of inefficiencies; it is characterized by full investment with very active management to enhance or protect capital while maintaining a superior, high-quality income stream.

Philip H. Brown II is chief investment officer; Kenneth L. Holmes is client contact.

Meridian Management Co.

1200 Plaza West Building, Little Rock,
Ark. 72205; (501) 663-7055

Total assets managed	$283,000,000
Total discretionary assets	$221,000,000
Discretionary tax-exempt	$200,000,000
Types of accounts managed	CEFU
Tax-exempt clients	14
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	2

Meridian Management Co. is an active equity, active fixed-income and balanced manager.

Its equity approach is value-oriented and keyed to buying deeply discounted stocks of viable companies. It stresses undervalued sectors, industries and issues that typically sell below book value and at relatively low multiples of normal earnings power.

Its fixed-income approach emphasizes undervalued securities and sectors investing in either high-grade or lower-grade issues depending on where the best opportunities exist.

Lee Bodenhamer is chief investment officer; Jennifer Wilson is client contact.

Merrill Lynch Asset Management Inc.

P.O. Box 9011, Princeton, N.J. 08543;
(609) 282-2000

Total assets managed	$97,400,000,000
Total discretionary assets	$97,100,000,000
Discretionary tax-exempt	$12,950,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	665
Minimum separate account	$1,000,000
No. of portfolio managers	52
Size of research staff	3

Merrill Lynch Asset Management Inc. is an active domestic equity and fixed-income, balanced, active international equity and fixed-income, and short-term manager.

Its equity approach is value-oriented, focusing on Graham & Dodd analysis of low p/e, high reinvestment rate companies. Its fixed-income approach emphasizes proper yield curve positioning through interest rate forecasting and yield curve analysis. Credit analysis and bond swaps add value. It prefers short-maturity, high-quality issues.

Arthur Zeikel is chief investment officer; Daniel J. Goldman is client contact.

Merus Capital Management

475 Sansome St., San Francisco,
Calif. 94111; (415) 296-6428

Total assets managed	$5,000,000,000
Total discretionary assets	$3,611,000,000
Discretionary tax-exempt	$1,346,000,000
Types of accounts managed	CEFU
Tax-exempt clients	26
Minimum separate account	$5,000,000
No. of portfolio managers	19
Size of research staff	7

Merus Capital Management is an active equity, active fixed-income, balanced and mutual fund manager.

In equity, the firm actively manages stocks of high-quality, defensive companies. Historical relative yield is the buy/sell discipline.

Its fixed-income approach adjusts portfolio maturities in response to interest rate forecasts. Movement is directed toward sectors that have the maximum risk-adjusted returns.

Harold C. Warner is chief investment officer and client contact.

Mesirow Asset Management

350 N. Clark St., Chicago, Ill. 60610;
(312) 670-6023

Total assets managed	$330,000,000
Total discretionary assets	$330,000,000
Discretionary tax-exempt	$150,000,000
401(k)/457 assets managed	$50,000,000
Types of accounts managed	CEF
Tax-exempt clients	100
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	3

Mesirow Asset Management is an active equity, passive fixed-income and balanced manager.

The firm uses a classical low p/e, value equity approach using a diversified portfolio of recognizable names. It has special expertise in small-cap value management.

Its fixed-income approach uses maturities of no longer than 10 years with at least an A rating.

Steven G. Gaber is chief investment officer.

Metric Institutional Realty Advisors

950 Tower Lane, Foster City, Calif.
94404; (415) 378-7000

Total assets managed	$1,950,000,000
Total discretionary assets	$1,934,000,000
Discretionary tax-exempt	$179,000,000
Equity real estate	$133,000,000
Mortgage assets	$46,000,000
Types of accounts managed	CEFGU
Minimum separate account	$25,000,000
No. of portfolio managers	11
Size of research staff	8

Metric Institutional Realty Advisors, a real estate manager, invests in institutional-grade, garden-style apartment properties in 23 targeted markets identified as having stable demographic, economic, real estate and quality of life environments.

Robert A. Fiddaman is chief investment officer and client contact.

Metropolitan Life Insurance

1 Madison Ave., New York, N.Y.
10010; (212) 578-6409

Total assets managed	$94,001,000,000
Total discretionary assets	$94,001,000,000
Discretionary tax-exempt	$49,084,000,000
Pooled accounts	$2,622,000,000
Separate accounts	$3,421,000,000
GICs	$17,130,000,000
Annuities	$10,241,000,000
Other	$15,670,000,000
401(k)/457 assets managed	$9,594,000,000
Equity real estate assets	$978,000.000
Equity indexed assets	$480,000,000
Fixed-income indexed assets	$60,000,000
Dedicated/immunized assets	$1,962,000,000
Tax-exempt clients:	
Pooled	618
Separate	20
Types of accounts managed	CGU
Minimum separate account	$5,000,000
No. of portfolio managers	32
Size of research staff	129

Metropolitan Life Insurance Co. is an active and passive equity, active and passive fixed-income, balanced, real estate and short-term manager.

Its active equity approach combines fundamental research and price sensitivity, seeking growth and emerging growth stocks.

Its fixed-income approach is based on interest rate anticipation. Incremental returns are added through analyses of the bond market, yield spreads, sectors and securities.

Its real estate investments focus on high-quality, well-located properties with strong income and excellent appreciation potential; adding value through innovative, professional property management; portfolio diversification by property type and location; seeking special opportunities; and the flexibility to sell at opportune time.

Additional assets are managed on its behalf by a subsidiary, State Street Research and Management Co.

Robert E. Chappell Jr. is chief investment officer; C. Robert Henrikson is client contact.

Metropolitan Trust Co. of Canada

6 Crescent Road, Toronto, Ontario
M4W 3K9; (416) 967-1813

Total assets managed	$5,172,000,000
Total discretionary assets	$1,000,000,000
Discretionary tax-exempt	$0
No. of portfolio managers	10
Size of research staff	65

Metropolitan Trust Co. of Canada, a Canadian firm, is a mortgage banker.

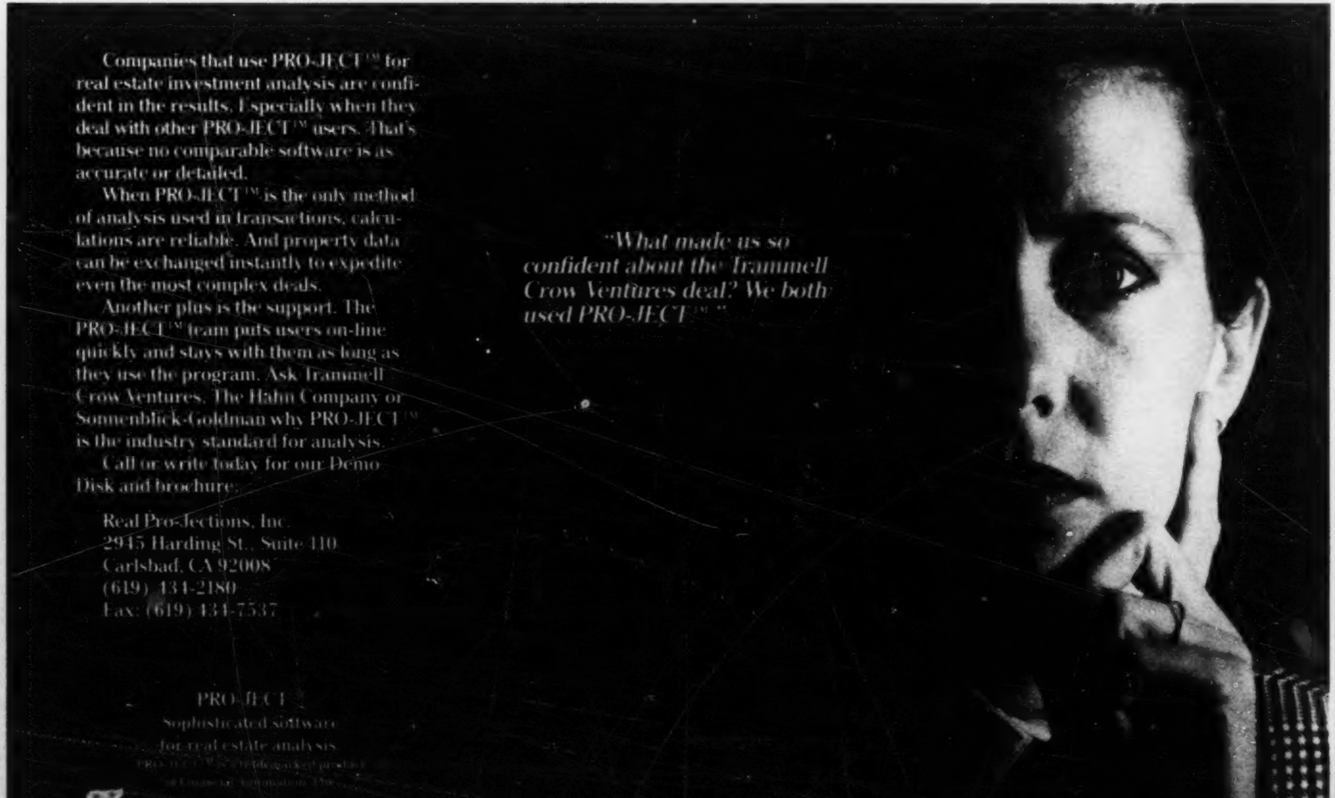
It originates specific mortgage investments and administers portfolios to meet clients' long- and short-term requirements. Yield and security are emphasized as well as diversity through syndication.

Paul Haggis is chief investment officer; John D. Donovan and Larry Burbidge are client contacts.

MFM Capital Management

1400 N. Semoran Blvd., Suite C,
Orlando, Fla. 32807; (407) 282-0700

Total assets managed	$1,000,000
Total discretionary assets	$1,000,000
Discretionary tax-exempt	$0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No. of portfolio managers	1

MFM Capital Management Inc. is a passive equity, active and passive fixed-income, balanced manager and options manager.

The firm combines interest rate anticipation and sector analysis in its investment approach. Preservation of capital is stressed. Pure equity positions are taken only in issues where no options exist.

John A. Maffei Jr. is chief investment officer and client contact.

MH & Associates, Securities Management Corp.

21031 Ventura Blvd., Suite 307,
Woodland Hills, Calif. 91364; (818) 704-4633

Total assets managed	$48,000,000
Total discretionary assets	$31,000,000
Discretionary tax-exempt	$25,000,000
Types of accounts managed	C
Tax-exempt clients	19
Minimum separate account	$500,000
No. of portfolio managers	2

MH & Associates, Securities Management Corp. is a balanced manager.

Its equity approach is top-down asset allocation and sector emphasis. Low p/e, underresearched and institutionally underowned stocks with market capitalization of less than $1 billion are stressed. It uses interest rate anticipation for fixed-income.

J. Robert Meichelbock is chief investment officer; John Heilman is client contact.

M&I Investment Management

770 N. Water St., Milwaukee, Wis.
53202; (414) 765-7770

Total assets managed	$4,007,000,000
Total discretionary assets	$3,335,000,000
Discretionary tax-exempt	$1,884,000,000
Types of accounts managed	CEFU
Minimum separate account	$1,000,000
No. of portfolio managers	21
Size of research staff	3

M&I Investment Management Corp. is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach is value-oriented. Emphasis is placed on medium- to large-cap companies exhibiting strong financial characteristics. Growth companies selling below their average p/e ratios and companies selling at discounts to their intrinsic values are stressed.

In fixed income, the firm actively manages intermediate-term bonds. Emphasis is placed on interest rate anticipation and sector analysis within the context of total return.

William J. Gumerman is chief investment officer; Judith C. Murphy is client contact.

Mid Atlantic Realty Advisors

2 North Shore Center, Pittsburgh, Pa.
15212; (412) 323-1010

Total assets managed	$232,000,000
Discretionary tax-exempt	$0
Minimum separate account	$20,000,000
No. of portfolio managers	3
Size of research staff	3

Mid Atlantic Realty Advisors, a real estate manager, invests in both existing and undeveloped office, industrial and retail properties in the major cities within a 500-mile radius of Pittsburgh.

C. Andrew Russell is chief investment officer; Jeffrey D. Kendall is client contact.

MIDCO Investors

751 Broad St., Newark, N.J. 07102;
(201) 802-6200

Total assets managed	$922,000,000
Total discretionary assets	$922,000,000
Discretionary tax-exempt	$463,000,000
Types of accounts managed	CGU
Tax-exempt clients	33
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	2

MIDCO Investors, an active equity manager, focuses on small companies with high ROEs, high earnings growth rates and high levels of employee ownership. The firm is a fully invested, bottom-up stock picker.

V. John Palicka is chief investment officer; Steven A. Bloom is client contact.

Midlantic National Bank

Metro Park Plaza, P.O. Box 600,
Edison, N.J. 08818; (201) 321-8382

Total assets managed	$5,600,000,000
Total discretionary assets	$5,600,000,000
Discretionary tax-exempt	$1,200,000,000
Pooled accounts	$745,000,000
Separate accounts	$455,000,000
401(k)/457 assets managed	$168,000,000
Tax-exempt clients:	
Commingled	850
Separate	50
Types of accounts managed	CEFU
Minimum separate account	$5,000,000
No. of portfolio managers	17
Size of research staff	4

Midlantic National Bank is an active equity, active fixed-income, balanced, short-term and GIC fund manager.

Its equity approach is value-oriented, emphasizing high quality, low p/e, above-average yield and low price to book. Computer screening is used extensively in ranking stocks based on selection criteria. Performance premium primarily results from stock selection rather than sector emphasis.

Its fixed-income approach emphasizes low risk through high-quality portfolios, moderate maturity shift with laddered structure and average maturity ranging between six and 12 years.

Gale Gillespie is chief investment officer; Jeff Moody is client contact.

Mid-State Capital Management

1130 12th Ave., Altoona, Pa. 16603;
(814) 946-6614

Total assets managed	$500,000,000
Total discretionary assets	$400,000,000
Discretionary tax-exempt	$200,000,000
401(k)/457 assets managed	$30,000,000
Types of accounts managed	CFGU
Tax-exempt clients	200
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	3

Mid-State Capital Management is an active and passive equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach focuses on low p/e stocks, market timing/tactical asset allocation and quantitative approaches. Its fixed-income approach uses interest rate anticipation and sector analysis.

Daniel B. Magee is chief investment officer and client contact.

MIG Cos.

1645 Palm Beach Lakes Blvd., Suite
600, West Palm Beach, Fla. 33401;
(407) 686-1800

Total assets managed	$1,175,000,000
Total discretionary assets	$455,000,000
Discretionary tax-exempt	$455,000,000
Equity real estate assets	$445,000,000
Mortgage assets	$10,000,000
Types of accounts managed	CG
Tax-exempt clients	15
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	3

MIG Cos., a real estate manager, invests in core real estate in less competitive metropolitan statistical areas on a moderately leveraged basis.

Larry Wright is chief investment officer; Charles Allen is client contact.

The Millburn Corp.

1270 Avenue of the Americas, New
York, N.Y. 10020; (212) 397-8844

Total assets managed	$235,000,000
Total discretionary assets	$235,000,000
Discretionary tax-exempt	$23,000,000
Types of accounts managed	C
Tax-exempt clients	2
Minimum separate account	$5,000,000
Size of research staff	5

The Millburn Corp. is a currency, financial and commodity futures manager.

It manages diversified portfolios of currencies; currencies plus interest rate and metal futures; and currencies plus interest rate, metal, energy stock index and agricultural commodity futures. It may trade options. Trading decisions are made primarily based on its proprietary technical systems.

Harvey Beker is chief investment officer; Mark B. Fitzsimmons is client contact.

Miller, Anderson & Sherrerd

1 Tower Bridge, West Conshohocken,
Pa. 19428; (215) 940-5000

Total assets managed	$21,995,000,000
Total discretionary assets	$21,995,000,000
Discretionary tax-exempt	$21,397,000,000
401(k)/457 assets managed	$20,000,000
International equity assets	$92,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	108
Minimum separate account	$35,000,000
No. of portfolio managers	18
Size of research staff	8

Miller, Anderson & Sherrerd is an active equity, active fixed-income, active international equity and short-term manager.

Its equity approach focuses on a disciplined valuation process and investment strategy that combines fundamental, quantitative analytical techniques, low p/e stocks and sector rotation.

Its fixed-income approach encompasses definition of benchmark duration range, maturity/duration management, yield curve analysis and sector/security selection. Securities are used to reduce overall portfolio risk, provide a real rate of return and protect against disinflation.

Paul F. Miller Jr. is chief investment officer; Glenn E. Becker is client contact.

MIMLIC Asset Management

400 N. Robert St., St. Paul, Minn.
55101; (612) 298-3826

Total assets managed	$5,500,000,000
Total discretionary assets	$4,997,000,000
Discretionary tax-exempt	$455,000,000
401(k)/457 assets managed	$100,000,000
Equity indexed assets	$21,000,000
Types of accounts managed	CF
Tax-exempt clients	26
Minimum separate account	$5,000,000
No. of portfolio managers	8
Size of research staff	13

MIMLIC Asset Management Co. is an active and passive equity, active fixed-income, balanced, real estate and short-term manager.

Its equity philosophy uses a value-based approach while maintaining a growth orientation. Fundamental analysis is used to identify sound companies whose stock prices do not reflect long-term growth potential. For fixed income, it purchases internally generated private placements.

Its real estate approach is to seek the most favorable total return. Portfolios may hold hybrid debt, triple-net lease transactions and joint venture or limited partnership interests.

Joseph R. Bird is chief investment officer; Jeffrey Winter is client contact.

Mississippi Valley Advisors

P.O. Box 387, St. Louis, Mo. 63166;
(314) 425-1234

Total assets managed	$3,900,000,000
Total discretionary assets	$3,900,000,000
Discretionary tax-exempt	$3,900,000,000
Equity real estate assets	$5,000,000
International equity assets	$5,000,000
Equity indexed assets	$45,000,000
Dedicated/immunized assets	$950,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	340
Minimum separate account	$1,000,000
No. of portfolio managers	11
Size of research staff	7

Mississippi Valley Advisors Inc. is an active and passive equity, active fixed-income, balanced and short-term manager.

Its primary equity approach is quantitative. Fundamental research is employed using a valuation model and screens comparing historical relative price to book ratios, estimated total earnings over one and three years based on projected corporate earnings and relative p/es, and its dividend discount model.

Its primary fixed-income approach provides enhanced value and sector allocation based on quantitative spread analysis as well as internal credit research.

John H. Blixen II is chief investment officer; Randall L. Kirkland is client contact.

The Mitchell Group Inc.

1100 Louisiana, Suite 4580, Houston,
Texas 77002; (713) 759-2070

Total assets managed	$5,000,000
Total discretionary assets	$5,000,000
Discretionary tax-exempt	$0
Minimum separate account	$5,000,000
No. of portfolio managers	2

The Mitchell Group Inc., an active equity manager, focuses solely on the energy industry using a bottom-up approach.

Rodney Mitchell is chief investment officer; Mr. Mitchell and Charles Gibbs are client contacts.

Mitchell Hutchins

1285 Avenue of the Americas, New
York, N.Y. 10019; (212) 713-4000

Total assets managed	$30,202,000,000
Total discretionary assets	$29,037,000,000
Discretionary tax-exempt	$8,908,000,000
401(k)/457 assets managed	$10,000,000
Equity indexed assets	$283,000,000
Fixed-income indexed assets	$586,000,000
Dedicated/immunized assets	$945,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	483
Minimum separate account	$1,000,000
No. of portfolio managers	43
Size of research staff	6

Mitchell Hutchins is an active and passive domestic equity and fixed-income, balanced, active international equity and fixed-income, short-term and venture capital manager.

The firm offers a broad variety of equity products including quantitative, small-cap, indexed, growth and other special equity products. In fixed income, it offers several specialized products.

Stephen E. Canter is chief investment officer; Cheryl K. Gruetzmacher is client contact.

MLP Advisory

6191 Lakeview Circle, San Ramon,
Calif. 94583; (415) 735-1225

Total assets managed	$5,000,000
Discretionary tax-exempt	$2,000,000
International equity assets	$1,000,000
Types of accounts managed	CU
Tax-exempt clients	10
Minimum separate account	$100,000
No. of portfolio managers	1
Size of research staff	1

MLP Advisory is an active and passive equity, passive fixed-income, passive international equity, short-term and GIC manager.

In equities, the firm is an asset hunter, focusing on resources-related companies and companies with undervalued assets. Emerging growth companies are targeted. Its fixed-income approach uses interest rate anticipation.

Michael J. Perlman is chief investment officer and client contact.

Monmouth Capital Management Inc.

990 Highland Drive, Suite 201, Solana
Beach, Calif. 92075; (619) 792-7097

Total assets managed	$0
Discretionary tax-exempt	$0
Minimum separate account	$5,000,000
No. of portfolio managers	1
Size of research staff	1

Monmouth Capital Management Inc. specializes in managed futures, covering a broad spectrum of contracts on general commodities, stock indexes and currencies. The firm operates on a "manager of manager" concept, selecting and monitoring independent commodity trading advisers.

David M. Love is chief investment officer and client contact.

Montag & Caldwell Inc.

2 Piedmont Center, Suite 500, Atlanta,
Ga. 30363-2401; (404) 262-3480

Total assets managed	$779,000,000
Total discretionary assets	$756,000,000
Discretionary tax-exempt	$512,000,000
401(k)/457 assets managed	$6,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	77
Minimum separate account	$5,000,000
No. of portfolio managers	7
Size of research staff	3

Montag & Caldwell Inc. is an active equity, active fixed-income and balanced manager.

For equities, it takes a bottom-up valuation approach that interrelates earnings momentum. Its fixed-income approach is based on duration management, maximizing the probability of outperforming the market within an expected range of rate movement by adjusting maturity, coupon and issuer.

Ronald E. Canakaris is chief investment officer; Homer W. Whitman Jr. is client contact.

Montreal Investment Management

1130 Sherbrooke St. W., Sixth Floor,
Montreal, Quebec; (514) 286-4500

See entry for AMI ASSET MANAGEMENT INTERNATIONAL INC.

Montrusco & Associates Inc.

1000 Sherbrooke W., Suite 2300,
Montreal, Quebec H3A 3C4; (514) 842-6464

Total assets managed	$2,028,000,000
Total discretionary assets	$2,028,000,000
Discretionary tax-exempt	$1,362,000,000
Non-North American equities	$42,000,000
Tax-exempt clients	54
Types of accounts managed	CEFU
Minimum separate account	$1,000,000
No. of portfolio managers	11
Size of research staff	2

Montrusco & Associates Inc., a Canadian firm, is an active equity, active fixed-income, balanced, active international equity and short-term manager.

Its equity approach is based on business cycle analysis, with stock selection generated from a multivariable quantitative approach highlighting total expected return.

Its fixed-income approach uses a process that involves scenario identification, quarterly probability weighted expected interest rate forecasting and rigorous spread analysis.

Andre Marsan is chief investment officer and client contact.

Moran Asset Management

41 W. Putnam Ave., Greenwich, Conn.
06830; (203) 869-5700

Total assets managed	$507,000,000
Total discretionary assets	$507,000,000
Discretionary tax-exempt	$414,000,000
Types of accounts managed	CFU
Tax-exempt clients	51
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	9

Moran Asset Management Inc., an active equity manager, invests in companies with superior fundamental strengths that are medium size, established, successful and growing, where equity securities are substantially undervalued on a real asset value basis.

Frederick A. Moran is chief investment officer; David E. Kaplan and Patrick Sheehan are client contacts.

J.P. Morgan Investment Management Inc.

522 Fifth Ave., New York, N.Y. 10036;
(212) 837-2300

Total assets managed	$62,411,000,000
Total discretionary assets	$62,411,000,000
Discretionary tax-exempt	$44,018,000,000
Equity real estate	$1,891,000,000
Mortgage assets	$1,817,000,000
International equity assets	$1,569,000,000
International fixed-income	$1,346,000,000
Equity indexed assets	$1,683,000,000
Dedicated/immunized assets	$6,582,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	500
No. of portfolio managers	44
Size of research staff	35

J.P. Morgan Investment Management Inc. offers active and passive equity, active fixed-income, balanced, tactical asset allocation, real estate, active international equity and fixed-income, short-term, convertibles, immunized fixed-income, oil and gas and currency hedging management.

Its equity approach is a focused internal analytical effort combined with disciplined valuation and portfolio construction. Stock selection is most important. In fixed-income, in addition to interest rate anticipation, the firm employs extended markets along with sector and yield spread analyses to provide incremental return and lower volatility.

Its real estate approach is to make direct investments in special-situation projects that provide high current income, cash flow growth potential and high residual property appreciation.

The firm provided $2.9 billion in overlay strategies, not included in the totals above.

David L. Brigham is chief investment officer; John R. Thomas is client contact.

Morgan Grenfell Capital Management Inc.

885 Third Ave., New York, N.Y. 10022;
(212) 230-2600

Total assets managed	$2,030,000,000
Total discretionary assets	$2,030,000,000
Discretionary tax-exempt	$954,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	27
Minimum separate equity account	$10,000,000
Minimum separate bond account	$25,000,000
No. of portfolio managers	10

Morgan Grenfell Capital Management Inc. is an active equity and active fixed-income manager.

It offers two equity approaches. For small-cap ($50 million to $500 million) stocks, the firm identifies undervalued emerging growth companies using a bottom-up approach combined with a top-down approach to selecting economic sectors. For rotational equities, the firm identifies sectors that show the best relative potential for investment.

Its fixed-income approach focuses on exploiting inefficiencies across all investment-grade bonds. Value is added through issue selection and trading.

J. Richard Walton is chief investment officer; James E. Minnick is client contact.

Morgan Grenfell Investment Services Ltd.

20 Finsbury Circus, London, EC2M
1NB U.K.; 01-25[illegible]-7500

Total assets managed	$3,134,000,000
Total discretionary assets	$3,134,000,000
Discretionary tax-exempt	$2,882,000,000
International equity assets	$2,501,000,000
International fixed-income assets	$266,000,000
International cash assets	$115,000,000
Types of accounts managed	CG
Tax-exempt clients	41
Minimum separate account	$10,000,000
No. of portfolio managers	10
Size of research staff	19

Morgan Grenfell Investment Services Ltd. is an active international/global equity and fixed-income manager.

Its equity approach uses growth stocks, low p/e stocks and market timing. Equal emphasis is placed on market and stock selection. No investments are made without considering the currency impact.

Its fixed-income approach combines active management of currencies, bond markets and maturities. Currency and bond market exposure decisions are separated through currency hedging.

Michael Bullock is chief investment officer; James Minnick is client contact in New York at (212) 230-2600.

Morgan Stanley Asset Management

1221 Avenue of the Americas, New
York, N.Y. 10020; (212) 296-7179

Total assets managed	$29,208,000,000
Total discretionary assets	$16,729,000,000
Discretionary tax-exempt	$13,360,000,000
International equity assets	$1,094,000,000
International fixed-income assets	$521,000,000
Dedicated/immunized assets	$500,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	330
Minimum separate equity account	$10,000,000
Minimum separate bond account	$50,000,000
No. of portfolio managers	28
Size of research staff	8

Morgan Stanley Asset Management is an active equity, active fixed-income, balanced, active and passive international equity, active international fixed-income, short-term and high yield/emerging growth stock manager.

Its primary equity approach combines market sector allocation with a growth and value-oriented selection process. Top-down and bottom-up elements are used.

Its fixed-income approach concentrates on active maturity shifting, with short- and intermediate-term holdings comprising the portfolio core. Long-term bonds are used opportunistically.

In addition to the assets above, the firm is fiduciary for $10.203 billion in tax-exempt assets.

Barton M. Biggs is chief investment officer; Perry E. Hall, Robert P. Follert, Gail Hunt Reeke and Patrick J. McMenamin are client contacts.

Morgan Stanley Asset Management/The Chicago Group

440 S. LaSalle St., Chicago, Ill. 60605;
(312) 765-6011

Total assets managed	$967,000,000
Total discretionary assets	$967,000,000
Discretionary tax-exempt	$792,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	33
Minimum separate account	$25,000,000
No. of portfolio managers	7
Size of research staff	3

Morgan Stanley Asset Management/The Chicago Group is an active equity and balanced manager.

Its equity strategy is classic value investing, seeking companies selling at less than the firm's research indicates to be their true worth. This results in portfolios with high yields, low p/es and low prices to book. Quantitative work endeavors to best define a company's fundamental value.

Its balanced funds integrate the value strategies in equity selection, bond selection and asset allocation. Each of these strategies emphasizes doing well in difficult markets, as well as providing superior performance over a market cycle.

Thomas S. White Jr. is chief investment officer; Stephen C. Sexauer is client contact.

Morguard Investments Ltd.

1027 Yonge St., Toronto, Ontario
M4W 3E8; (416) 967-0880

Total assets managed	$1,600,000,000
Total discretionary assets	$1,600,000,000
Discretionary tax-exempt	$1,600,000,000
For subsidiaries of U.S. firms	$0
Equity real estate assets	$1,600,000,000
Tax-exempt clients	34
Types of accounts managed	CG

Morguard Investments Ltd., a Canadian firm, is a real estate manager.

Its investment philosophy is to acquire or develop only high-quality, income-producing properties suitable for pension fund investment. Assets are diversified by property type and location. While the firm aggressively pursues above-average returns from its investments, its primary concern is the safeguarding of assets.

A.K. "Tony" Stephens is chief investment officer; W.A. "Tony" Houghton, is client contact.

Morison Asset Management

1221 Nicollet Mall, Suite 700,
Minneapolis, Minn. 55403; (612)
332-1588

Total assets managed	$1,492,000,000
Total discretionary assets	$1,492,000,000
Discretionary tax-exempt	$628,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	264
Minimum separate account	$250,000
No. of portfolio managers	10
Size of research staff	3

Morison Asset Management Inc. is an active equity, active fixed-income, balanced, tactical asset allocation and GIC manager.

Its equity approach emphasizes asset allocation over business and interest rate cycles based on absolute potential risk analysis. Allocation is driven by availability of quality issues using a core list of fast growing companies. In fixed income, it takes advantage of yield curve analysis to increase yield and control maturity and duration.

Richard B. Hume is chief investment officer; Ronald Halverson is client contact.

Morley Capital Management

5285 S.W. Meadows Road, Suite 400,
Lake Oswego, Ore. 97035; (503)
635-5414

Total assets managed	$4,700,000,000
Total discretionary assets	$4,700,000,000
Discretionary tax-exempt	$4,700,000,000
401(k)/457 assets managed	$4,000,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	47
Minimum separate account	$25,000,000
No. of portfolio managers	5
Size of research staff	7

Morley Capital Management Inc., a GIC manager, seeks to provide a predictable maximum rate of return while preserving the safety of capital and avoiding market risk.

Harold H. Morley is chief investment officer; Joanne Burdic is client contact.

Morrison, Karsten, Ramzy & Arthur Inc.

438 First St., Suite 200, Santa Rosa,
Calif. 95401; (707) 575-9416

Total assets managed	$40,000,000
Total discretionary assets	$18,000,000
Discretionary tax-exempt	$12,000,000
Equity real estate assets	$12,000,000
Types of accounts managed	GU
Tax-exempt clients	2
Minimum separate account	$500,000
No. of portfolio managers	5

Morrison, Karsten, Ramzy & Arthur Inc., a real estate manager, specializes in the management of problem and underperforming real estate assets. It emphasizes an intensive, hands-on, common-sense approach to asset management.

Steve Morrison is chief investment officer and client contact.

Morse, Williams & Co.

641 Lexington Ave., New York, N.Y.
10022; (212) 838-8668

Total assets managed	$265,000,000
Total discretionary assets	$265,000,000
Discretionary tax-exempt	$98,000,000
Types of accounts managed	CEF
Tax-exempt clients	17
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	1

Morse, Williams & Co. is an active equity, active and passive fixed-income and balanced manager.

Its equity approach focuses on growth and emerging growth stocks, with an emphasis on companies with strong growth fundamentals, exceptional niche industry positions, proven management and profitability.

In fixed income, it emphasizes high-grade corporate and U.S. government instruments, with some investment-grade issues used when appropriate. Maturities are laddered.

Robert P. Morse is chief investment officer; David B. Roosevelt is client contact.

Mt. Auburn Management

79 Milk St., Boston, Mass. 02109;
(617) 423-7707

Total assets managed	$51,000,000
Total discretionary assets	$51,000,000
Discretionary tax-exempt	$43,000,000
Types of accounts managed	CEF
Tax-exempt clients	3
Minimum separate account	$10,000,000
No. of portfolio managers	1

Mt. Auburn Management, an active equity manager, seeks changes in relative valuation, usually from changes in growth rates. Portfolios are extremely concentrated so market correlation is very low.

Alan J. Dworsky is chief investment officer and client contact.

Mount Lucas Management

100 Palmer Square, CN 190,
Princeton, N.J. 08542; (609)
924-8868

Total assets managed	$281,000,000
Total discretionary assets	$281,000,000
Discretionary tax-exempt	$257,000,000
Types of accounts managed	C
Tax-exempt clients	3
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	4

Mount Lucas Management Corp., a futures manager, forms an investment portfolio by allocation capital based on internal research and its proprietary approach to design technology.

The portfolio employs a mix of approaches with different trading characteristics to ensure balance and good performance in varying market environments. The portfolio incorporates trading in all major futures markets.

MPT Associates Inc.

630 Fifth Ave., New York, N.Y. 10111;
(212) 247-5858

Total assets managed	$1,400,000,000
Total discretionary assets	$1,400,000,000
Discretionary tax-exempt	$1,100,000,000
Types of accounts managed	CEFU
Tax-exempt clients	26
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	2

MPT Associates Inc. is an active equity, active fixed-income and balanced manager, specializing in socially responsive portfolios.

Its equity approach is disciplined and growth oriented. Its primary fixed-income approach is active, with investment-grade portfolios constructed around the Shearson Lehman Hutton Government/Corporate Bond Index.

Gerald L. Goldwin is chief investment officer; F. Allen Dudley is client contact.

MSR Advisors Inc.

80 Maiden Lane, 19th floor, New York,
N.Y. 10038; (212) 422-8040

Total assets managed	$218,000,000
Total discretionary assets	$218,000,000
Discretionary tax-exempt	$29,000,000
Types of accounts managed	CFG
Tax-exempt clients	3
Minimum separate account	$3,000,000
No. of portfolio managers	1
Size of research staff	4

MSR Advisors Inc. is an active equity and active fixed-income manager.

In equity, the firm uses a proprietary technical approach to stock selection based on mathematical study of price movement patterns of S&P 500 stocks. Its fixed-income approach uses anticipatory timing based on price cyclicality of U.S. Treasuries.

Frank A. Peluso is chief investment officer; John D. Mathai is client contact.

MT Associates

22 Front St. W., 2nd Floor, Toronto,
Ontario M5J 1C4; (416) 860-0616

Total assets managed	$1,808,000,000
Total discretionary assets	$1,808,000,000
Discretionary tax-exempt	$1,808,000,000
For subsidiaries of U.S. firms	$1,100,000,000
Tax-exempt clients	144
U.S. subsidiaries	93
Types of accounts managed	CEFU
Minimum separate account	$5,000,000
No. of portfolio managers	8
Size of research staff	2

MT Associates, a Canadian firm, is an active equity, active fixed-income, balanced, active international equity and short-term manager.

Its equity approach is disciplined and value-oriented, using proprietary screens and systems as well as extensive internal research to identify undervalued stocks.

Its fixed-income approach uses a low-risk, duration-based strategy combined with active exploitation of market inefficiencies.

D. Alex Wilson is chief investment officer; S. Keith Lupton is client contact.

Mu-Cana Investment Counselling

227 King St. S., Waterloo, Ontario N2J
4C5; (519) 888-2750

Total assets managed	$5,395,000,000
Total discretionary assets	$5,395,000,000
Discretionary tax-exempt	$4,373,000,000
For subsidiaries of U.S. firms	$577,000,000
Dedicated/immunized assets	$81,000,000
Tax-exempt clients	108
U.S. subsidiaries	22
Types of accounts managed	CEFGU
Minimum separate account	$8,000,000
No. of portfolio managers	9
Size of research staff	2

Mu-Cana Investment Counselling, a Canadian firm, is an active equity and active and passive fixed-income manager.

Its equity approach is value-oriented, emphasizing low p/e stocks and Graham & Dodd analysis.

Its fixed-income approach uses interest rate anticipation.

H.E. "Ted" Brough is chief investment officer; David Paleczny is client contact.

Muhlenkamp & Co. Inc.

12300 Perry Highway, Wexford, Pa.
15090; (412) 935-5520

Total assets managed	$34,000,000
Total discretionary assets	$34,000,000
Discretionary tax-exempt	$19,000,000
Types of accounts managed	CFG
Tax-exempt clients	25
Minimum separate account	$200,000
No. of portfolio managers	1
Size of research staff	1

Muhlenkamp & Co. Inc. is an active equity and active fixed-income manager.

Its equity approach emphasizes low p/e stocks and Graham & Dodd analysis. Its fixed-income approach is based on interest rate anticipation.

Ronald H. Muhlenkamp is chief investment officer and client contact.

Munder Capital Management

260 E. Brown St., Suite 100,
Birmingham, Mich. 48009; (313)
647-9200

Total assets managed	$2,019,000,000
Total discretionary assets	$2,019,000,000
Discretionary tax-exempt	$1,801,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	86
Minimum separate account	$5,000,000
No. of portfolio managers	8
Size of research staff	1

Munder Capital Management Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach emphasizes demonstrated growth, low p/es and financially stable balance sheets in a bottom-up, disciplined style to identify companies with superior fundamental and value characteristics to the market.

In fixed income, it uses active and quantitative methodologies that analyze effective duration, convexity, sectors and the yield curve.

Lee Munder is chief investment officer; Elyse Goldin Essick is client contact.

Murray Johnstone International Ltd.

875 N. Michigan Ave., Suite 3415,
Chicago, Ill. 60611; (312) 951-5995

Total assets managed	$253,000,000
Total discretionary assets	$253,000,000
Discretionary tax-exempt	$243,000,000
International equity assets	$230,000,000
International fixed-income assets	$13,000,000
Types of accounts managed	CFG
Tax-exempt clients	17
Minimum separate account	$5,000,000
No. of portfolio managers	10

Murray Johnstone International Ltd. is an international and regional equity and fixed-income manager.

Its equity approach begins with macroeconomic evaluation, leading to country allocation. Security selection is based on a long-term value-oriented approach.

Its fixed-income approach uses interest-rate anticipation. Appropriate country allocation and duration structures are determined, but final selection focuses on bond quality.

Michael Parlett is chief investment officer; Susan Mullin is client contact.

Mutual of America Life Insurance Co.

666 Fifth Ave., New York, N.Y. 10103;
(212) 399-1600

Total assets managed	$4,986,000,000
Total discretionary assets	$4,986,000,000
Discretionary tax-exempt	$4,986,000,000
Pooled accounts	$753,000,000
GICs	$148,000,000
Other	$4,085,000
401(k)/457 assets managed	$73,000,000
Mortgage assets	$101,000,000
Types of accounts managed	CEFG
No. of portfolio managers	6
Size of research staff	5

Mutual of America Life Insurance Co. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is to emphasize companies with a value orientation. Its fixed-income approach is active, shifting yield profiles, market sector relationships and economic trends.

Joan M. Casson and Thomas J. Verage are chief investment officers; Thomas J. Moran is client contact.

Mutual Benefit Life Insurance Co.

520 Broad St., Newark, N.J. 07102;
(201) 481-8600

Total assets managed	$11,344,000,000
Discretionary tax-exempt	$5,760,000,000
Pooled accounts	$354,000,000
Separate accounts	$32,000,000
GICs	$1,847,000,000
Annuities	$174,000,000
Other	$3,353,000,000
401(k)/457 assets managed	$111,000,000
Tax-exempt clients:	
Separate	1
Minimum separate account	$50,000,000
No. of portfolio managers	9
Size of research staff	20

Mutual Benefit Life Insurance Co. is an active equity, active fixed-income, real estate and short-term manager.

Its equity approach follows Graham & Dodd principles. It seeks oversold, underfollowed and undervalued issues.

Its fixed-income approach uses immunization. It is primarily concerned with the highest after-tax yield and matching of asset liability and maturity.

Its real estate approach seeks to obtain smaller properties that are diversified by type and location to afford a greater degree of diversity.

Ted D. Simmons is chief investment officer; Michael K. Farrell is client contact.

Mutual of New York (MONY)

4 Manhattanville Road, Purchase, N.Y.
10583; (914) 697-8000

Total assets managed	$21,400,000,000
Total discretionary assets	$19,400,000,000
Discretionary tax-exempt	$6,912,000,000
Pooled accounts	$872,000,000,000
Separate accounts	$1,971,000,000
GICs	$2,350,000,000
Other	$1,719,000,000
401(k)/457 assets managed	$830,000,000
Equity real estate assets	$227,000,000
Mortgage assets	$2,917,000,000
Tax-exempt clients	8
Types of accounts managed	CE
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	25

Mutual of New York (MONY) is a passive equity, active and passive fixed-income, balanced, tactical asset allocation, real estate and short-term manager.

Its equity approach is to maximize the opportunity for superior investment performance and to minimize investment risk through investments in stock with above-average dividend yields. Stock must be sold when dividend yield falls below the S&P 500.

Its fixed-income approach is to select securities with high credit quality, long maturities and long duration. Selection is based on current interest rate environments or individual security characteristics. Emphasis is on market analysis.

In real estate, it invests in properties that provide a favorable cash return and significant appreciation in value.

Another $98 million is managed on the firm's behalf by external managers.

Floyd L. Smith is chief investment officer; Gary Lineberry is client contact.

Mutual Service Life Insurance Co.

P.O. Box 64035, St. Paul, Minn.
55164; (612) 631-7000

Total assets managed	$515,000,000
Total discretionary assets	$279,000,000
Discretionary tax-exempt	$279,000,000
Pooled accounts	$37,000,000
GICs	$90,000,000
Annuities	$7,000,000
Other	$145,000,000
401(k)/457 assets managed	$65,000,000
Types of accounts managed	C
Minimum separate account	$35,000
No. of portfolio managers	2
Size of research staff	2

Mutual Service Life Insurance Co. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is value-oriented and risk-averse, stressing low volatility and consistent returns. In fixed income, the firm analyzes sectors and the yield curve. It also manages effective duration and convexity.

Loren A. Haugland is chief investment officer; Steve White is client contact.

N

Narragansett Capital Inc.

50 Kennedy Plaza, Providence, R.I.
02903; (401) 751-1000

Total assets managed	$450,000,000
Discretionary tax-exempt	$165,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	15
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	6

Narragansett Capital Inc. is an equity manager in leveraged buy-outs, taking equity positions in transactions made by the firm.

Arthur D. Little, Gregory P. Barber, Jonathan M. Nelson and Roger A. Vandenberg are chief investment officers; Mr. Little is client contact.

National Bank of Commerce

P.O. Box 82408, Lincoln, Neb. 68501;
(402) 434-4419

Total assets managed	$650,000,000
Total discretionary assets	$433,000,000
Discretionary tax-exempt	$177,000,000

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Bethesda, MD 20814

Pooled accounts	$115,000,000
Separate accounts	$62,000,000
401(k)/457 assets managed	$40,000,000
Tax-exempt clients	
Pooled	143
Separate	80
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	7
Size of research staff	6

National Bank of Commerce is an active equity, active fixed-income and short-term manager.

Its equity approach emphasizes emerging growth and value stocks with positive earnings momentum, low price earnings multiples and positive stock momentum. Its fixed-income approach involves a complete economic analysis and anticipation of inflation trends. It seeks quality and uses interest rate anticipation.

James T. Hitt is chief investment officer, Keith S. Vasey is client contact.

National Bank of Detroit

611 Woodward Ave., Detroit, Mich.
48226; (313) 225-1000

Total assets managed	$58,000,000,000
Total discretionary assets	$11,000,000,000
Discretionary tax-exempt	$7,000,000,000
Pooled accounts	$2,300,000,000
Separate accounts	$4,700,000,000
401(k)/457 assets managed	$250,000,000
International equity assets	$10,000,000
Equity indexed assets	$215,000,000
Fixed-income indexed assets	$78,000,000
Dedicated/immunized assets	$296,000,000
Tax-exempt clients	
Commingled	853
Separate	146
Types of accounts managed	CEFGU
Minimum separate account	$5,000,000
No. of portfolio managers	18
Size of research staff	20

National Bank of Detroit is an active and passive equity, active and passive fixed-income, balanced, active international equity, short-term, GIC and social investing manager.

The bank offers three active equity strategies: large-cap emphasizing earnings growth with a strong value discipline; large-cap emphasizing a value/contrarian approach; and a small- to intermediate-cap style.

It has three primary fixed-income disciplines: Duration, which is based on interest rate anticipation; value, based on spread relationships and yield curve considerations; and high-quality.

James M. Lane is chief investment officer; John K. Broman is client contact.

National City Bank

P.O. Box 5756, Cleveland, Ohio,
44101-0756; (216) 575-2000

Total assets managed	$8,162,000,000
Discretionary tax-exempt	$4,000,000,000
Pooled accounts	$592,000,000
Separate accounts	$3,408,000,000
Tax-exempt clients:	
Commingled	6
Separate	810
Types of accounts managed	EFU
Minimum separate account	$1,000,000
No. of portfolio managers	16
Size of research staff	10

National City Bank is an active equity, active fixed-income, balanced, short-term and GIC manager.

Its primary equity approach focuses on a company's market, competitive advantage, management, return on equity and consistent, rather than cyclical, earnings growth. In fixed income, maturity structures of portfolios are minimally adjusted in anticipation of interest rate changes with sector strategies, corporates and agencies used to capture yield advantages, enhancing total return.

Larry Kekst and David B. Hiller are chief investment officers; Richard A. Wainio is client contact.

National Investment Services of America Inc.

815 E. Mason St., Milwaukee, Wis.
53202; (414) 271-6540

Total assets managed	$6,188,000,000
Total discretionary assets	$6,188,000,000
Discretionary tax-exempt	$5,968,000,000
Fixed-income indexed assets	$200,000,000
Dedicated/immunized assets	$5,000,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	44
Minimum separate account	$5,000,000
No. of portfolio managers	15

National Investment Services of America Inc. is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach uses growth stocks, believing earnings momentum is the central influence on price. It uses a disciplined, rigorous daily search of the fixed-income markets for opportunities to add value to portfolios.

Its dedicated stock approach links equity portfolios to plan liabilities.

Jess B. Yawitz and Eugene G. Martin are chief investment officers; Thomas R. Tuschen, Robert L. Holz and Mary Jo Dempsey are client contacts.

National Property Advisors

100 Galleria Parkway N.W., Suite
1620, Atlanta, Ga. 30337; (404)
988-9008

Total assets managed	$280,000,000
Total discretionary assets	$280,000,000
Discretionary tax-exempt	$114,000,000
Equity real estate assets	$106,000,000
Mortgage assets	$5,000,000
Types of accounts managed	CG
Tax-exempt clients	9
Minimum separate account	$20,000,000
No. of portfolio managers	2
Size of research staff	3

National Property Advisors, a real estate manager, specializes in industrial distribution warehouses.

It uses wholly owned equity investments with active in-house management. Leverage and other risk elements are tailored to investor objectives.

Andrew B. McGregor is chief investment officer; Charles J. Smiler is client contact.

National Trust Co.

21 King St., Third Floor, Toronto,
Ontario M5C 1B3; (416) 361-3887

Total assets managed	$6,785,000,000
Total discretionary assets	$1,677,000,000
Discretionary tax-exempt	$1,677,000,000
For subsidiaries of U.S. firms	$52,000,000
Mortgage assets	$12,000,000
Non-North American equities	$31,000,000
Equity indexed assets	$82,000,000
Tax-exempt clients	19
U.S. subsidiaries	5
Types of accounts managed	CEF
Minimum separate account	$6,000,000

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Based on performance of Institutional Bond Fund through 12/31/89. Source: SEI

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No. of portfolio managers	7

National Trust Co., a Canadian firm, is an active and passive equity, active fixed-income, balanced, active international equity, short-term and mortgage manager.

Its equity approach is driven by theme investing supported by computer screens to identify undervalued sectors or stocks. Its fixed-income approach uses interest rate anticipation and sector analysis, emphasizing quality and marketability of holdings that are actively traded to maximize returns.

John Crocker is chief investment officer. Barbara Johnson is client contact.

National Westminster Bank New Jersey

1 Gateway Center, Newark, N.J.
07102; (201) 648-8027

Total assets managed	$1,337,000,000
Total discretionary assets	$1,337,000,000
Discretionary tax-exempt	$793,000,000
Pooled accounts	$212,000,000
Separate accounts	$581,000,000
401(k)/457 assets managed	$14,000,000
International equity assets	$7,000,000
Tax-exempt clients	
Commingled	157
Separate	393
Types of accounts managed	CEFGU
Minimum separate account	$500,000
No. of portfolio managers	9

National Westminster Bank New Jersey is an active equity, active fixed-income, balanced, passive international equity and short-term manager.

Its primary equity approach is value-oriented, emphasizing Graham & Dodd analysis of emerging growth, growth and low p/e stocks, and market timing in its top-down stock selection.

Its fixed-income approach is macroeconomic, using active management in maturity structure, quality distribution and sector selection.

John J. Saueracker is chief investment officer; J. Thomas Chiolo is client contact.

Nationar

330 Madison Ave., New York, N.Y.
10017; (212) 551-1800

Total assets managed	$1,300,000,000
Total discretionary assets	$1,300,000,000
Discretionary tax-exempt	$100,000,000
401(k)/457 assets managed	$100,000,000
International cash assets	$7,000,000
Types of accounts managed	C
No. of portfolio managers	1
Size of research staff	1

Nationar is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is value oriented, using low p/e stocks and Graham & Dodd analysis.

Debra Winslow is client contact.

Nationwide Life Insurance

1 Nationwide Plaza, Columbus, Ohio
43216; (614) 247-7111

Total assets managed	$8,217,000,000
Total discretionary assets	$8,217,000,000
Discretionary tax-exempt	$5,552,000,000
Pooled accounts	$43,000,000
Separate accounts	$636,000,000
GICs	$355,000,000
Annuities	$653,000,000
Other	$3,865,000,000
401(k)/457 assets managed	$2,932,000,000
Tax-exempt clients	
Separate	3
Types of accounts managed	CGU
Minimum separate account	$10,000,000
No. of portfolio managers	34

Nationwide Life Insurance Co. is an active equity, active and passive fixed-income and balanced manager.

Its primary equity approach combines Graham & Dodd analysis with emerging growth, growth and low p/e stocks, and sector rotation. It substantially overweights attractive industries. Its fixed-income approach discerns relative value in different sectors.

An additional $686 million in tax-exempt assets are managed on its behalf by external managers.

Peter F. Frenzer is chief investment officer; Anthony F. Lisi is client contact.

NCM Capital Management Group Inc.

501 Willard St., Durham, N.C. 27701;
(919) 688-0620

Total assets managed	$419,000,000
Total discretionary assets	$362,000,000
Discretionary tax-exempt	$289,000,000
Types of accounts managed	CEF
Tax-exempt clients	25
Minimum separate account	$5,000,000
No. of portfolio managers	3

NCM Capital Management Group Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach screens for low p/e, positive earnings momentum, positive earnings surprise and quality. Its primary fixed-income approach is based on duration and sector management, using interest rate anticipation and sector analysis.

Maceo K. Sloan is chief investment officer; Justin Beckett is client contact.

NCNB National Bank

1 NCNB Plaza, Charlotte, N.C. 28255;
(704) 374-8008

Total assets managed	$65,260,000,000
Total discretionary assets	$23,305,000,000
Discretionary tax-exempt	$9,727,000,000
Pooled accounts	$2,963,000,000
Separate accounts	$6,764,000,000
401(k)/457 assets managed	$3,160,000,000
Real estate equity assets	$799,000,000
International equity assets	$16,000,000
Equity indexed assets	$700,000,000
Tax-exempt clients	
Commingled	2,114
Separate	2,617
Types of accounts managed	CEFGU
Minimum separate account	$1,000,000
No. of portfolio managers	46
Size of research staff	13

NCNB National Bank is an active and passive equity, active and passive fixed-income, balanced, tactical asset allocation, real estate, active international equity and short-term manager.

Its equity approach uses top-down analysis and sector rotation, moving toward companies displaying earnings momentum at reasonable relative and absolute value. Its fixed-income approach focuses on duration relative to the Shearson Lehman Hutton index with value added by sector swaps and interest rate anticipation.

In real estate, it provides capital appreciation and current income through equity investments in high-quality, diversified commercial and industrial property in the Southeast.

Charles G. Smith IV is chief investment officer; James C. Rhea III and K. Nick Kinney are client contacts.

Nelson, Benson & Zellmer

455 Sherman St., Suite 100, Denver,
Colo. 80203; (303) 778-6800

Total assets managed	$427,000,000
Total discretionary assets	$427,000,000
Discretionary tax-exempt	$293,000,000
Types of accounts managed	CEFG
Tax-exempt clients	30
Minimum separate account	$1,000,000
No. of portfolio managers	4

Nelson, Benson & Zellmer Inc. is an active equity, active fixed-income and balanced manager.

A bottom-up, growth-stock manager, the firm stresses three elements of fundamental financial analysis: growth of earnings, return on equity, and quality of management.

Its primary fixed-income approach is passive, focusing on high quality and intermediate maturity.

W. Peterson Nelson is chief investment officer; John A. Benson is client contact.

Nelson Capital Management

525 University Ave., Suite 810, Palo
Alto, Calif. 94301; (415) 326-0200

Total assets managed	$160,000,000
Total discretionary assets	$160,000,000
Discretionary tax-exempt	$80,000,000
401(k)/457 assets managed	$30,000,000
Types of accounts managed	CEF
Tax-exempt clients	24
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	2

Nelson Capital Management is an active fixed-income, balanced and short-term manager.

Its equity approach combines fundamental analysis with a valuation model to uncover growing companies with strong earnings trends and high potential returns. Its fixed-income approach focuses on high quality and liquidity but also considers interest rate fluctuations, market inefficiencies, yield curve analysis and duration.

Philip S. Nelson is chief investment officer; Suanne M. Ramar is client contact.

Neuberger & Berman

522 Fifth Ave., New York, N.Y. 10036;
(212) 790-9669

Total assets managed	$18,047,000,000
Discretionary tax-exempt	$8,265,000,000
401(k)/457 assets managed	$250,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	257
Minimum separate account	$10,000,000
No. of portfolio managers	54
Size of research staff	16

Neuberger & Berman is an active equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

In equities, it is value-driven, employing an active bottom-up stock selection approach focusing on low p/es, low price-to-book and market capitalization of $500 million to $6 billion.

Its fixed-income approach is a limited maturity strategy, investing in securities of five years or less to provide low volatility and generate high current income.

Richard Cantor is chief investment officer; Robert McComsey is client contact.

New Japan Capital Management (USA) Inc.

1 World Trade Center, Suite 9151,
New York, N.Y. 10048; (212)
912-0526

Total assets managed	$2,431,000,000
Total discretionary assets	$1,336,000,000
Discretionary tax-exempt	$0
Minimum separate account	$1,000,000
No. of portfolio managers	15
Size of research staff	5

New Japan Capital Management (USA) Inc. is an active and passive international equity and active international fixed-income manager.

Its equity approach is value-oriented and quantitative, using fundamental and technical factors. Its fixed-income approach uses interest rate anticipation. Optimum asset allocation by maturity uses macroeconomic and technical indicators.

Noboru Imai is chief investment officer; Hiroshi Takahashi and Katherine Buck are client contacts.

New York Life Insurance Co.

51 Madison Ave., New York, N.Y.
10010; (212) 576-7000

Total assets managed	$40,144,000,000
Total discretionary assets	$37,470,000,000
Discretionary tax-exempt	$12,643,000,000
Pooled accounts	$342,000,000
GICs	$7,863,000,000
Annuities	$2,121,000,000
Other	$2,317,000,000
Equity real estate assets	$25,000,000
Mortgage assets	$1,674,000,000
International equity assets	$28,000,000
Equity indexed assets	$106,000,000
Fixed-income indexed assets	$46,000,000
Tax-exempt clients	371
Types of accounts managed	CU
Minimum separate account	$100,000
No. of portfolio managers	8
Size of research staff	20

New York Life Insurance Co. is an active and passive equity, active and passive fixed-income, tactical asset allocation, short-term, convertible securities and active international/global equity manager.

Its growth equity approach focuses on companies with earnings growth above the S&P 500. The value equity account seeks companies with value not reflected in the stock price. The indexed account tracks the S&P.

In fixed income, it combines partial market timing and an actively managed core to provide returns that exceed inflation. Buy/sell disciplines are emphasized; sector analysis is used.

William Keiter is chief investment officer; Linda Livornese is client contact.

Newbold's Asset Management Inc.

937 Haverford Road, Bryn Mawr, Pa.
19102; (215) 526-6557

Total assets managed	$4,252,000,000
Total discretionary assets	$4,252,000,000
Discretionary tax-exempt	$4,116,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	128
Minimum separate account	$10,000,000
No. of portfolio managers	11
Size of research staff	11

Newbold's Asset Management Inc., an active equity and balanced manager, uses a value-oriented approach emphasizing low p/e.

Its fixed-income approach is passive.

Timothy M. Havens is chief investment officer; Daniel J. Hopkins Jr. is client contact.

Newbold's Investment Advisors

1500 Walnut St., Philadelphia, Pa.
19102; (215) 893-8180

Total assets managed	$575,000,000
Total discretionary assets	$242,000,000
Discretionary tax-exempt	$143,000,000
Types of accounts managed	CEF
Tax-exempt clients	82
Minimum separate account	$500,000
No. of portfolio managers	7
Size of research staff	4

Newbold's Investment Advisors is an active equity and balanced manager.

In equities, through the use of a quantitative screen to reduce the universe, it carefully analyzes about 180 companies for value, dividends and low p/es.

The fixed-income portion of the portfolio is a mechanism to preserve capital. The emphasis is on safety and liquidity, so bond maturities generally are maintained at less than 10 years.

F.W. Elliot Farr is chief investment officer; Brian J. McGrath is client contact.

NewSouth Capital Management Inc.

755 Crossover Lane, Suite 233,
Memphis, Tenn. 38117; (901)
761-5561

Total assets managed	$784,000,000
Total discretionary assets	$749,000,000
Discretionary tax-exempt	$573,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	94
Minimum separate account	$2,000,000
No. of portfolio managers	7

NewSouth Capital Management Inc. is an active equity, active fixed-income, balanced and short-term manager.

In equities, the firm invests in companies with strong balance sheets and significant insider ownership that generate free cash flow. Holdings typically generate discount multiples of earnings and book value. Its fixed-income approach employs sector analysis. Internal and external credit research coupled with emphasis on relative sector value contribute to capital preservation goals.

D. Stephen Morrow is chief investment officer; James A. Thomas III is client contact.

25 largest managers of dedicated/immunized bond portfolios

Firm	$ mils.*
J.P. Morgan	6,587
Prudential Fixed Income	6,057
Nat'l Investment Services	5,000
Bankers Trust	4,445
Pacific Financial	3,641
CIGNA Asset	3,403
G.E. Investment	2,352
Bank of New York	2,000
Metropolitan Life	1,962
Mellon Bond	1,714
Chase Investors	1,638
Lincoln Nat'l Investment	1,253
Lincoln Capital	1,224
Southwestern Life	1,000
First Wisconsin Trust	950
Mississippi Valley	950
Mitchell Hutchins	945
Putnam	944
State Street Bank	941
Aon Advisors	889
Goldman Sachs Asset	866
Wright Investors'	782
BEA Associates	713
McGlinn Capital	640
Dewey Square	600
Total	**51,496**

*Discretionary, tax-exempt assets

NFJ Investment Group Inc.

2121 San Jacinto St., Suite 1440,
Dallas, Texas 75201; (214)
754-1780

Total assets managed	$281,000,000
Total discretionary assets	$281,000,000
Total discretionary tax-exempt	$273,000,000
Types of accounts managed	CFU
Tax-exempt clients	10
Minimum separate account	$2,000,000
No. of portfolio managers	3

NFJ Investment Group Inc. is an active equity manager.

Its disciplined, low p/e equity approach is applied to an income equity strategy, a small-cap value strategy and a concentrated equity style.

Ben Fischer, Christopher Najork and John Johnson are chief investment officers; Bob Clark is client contact.

Nicholas Co. Inc.

700 N. Water St., Milwaukee, Wis.
53202; (414) 272-4650

Total assets managed	$2,364,000,000
Total discretionary assets	$2,364,000,000
Discretionary tax-exempt	$450,000,000
Types of accounts managed	CEF
Tax-exempt clients	29
Minimum separate account	$10,000,000
No. of portfolio managers	2
Size of research staff	2

Nicholas Co. Inc., an active equity and balanced manager, takes a growth and low p/e approach to equities and a passive approach to fixed income.

Albert O. Nicholas is chief investment officer; David L. Johnson is client contact.

Nicholas-Applegate Capital Management

501 W. Broadway, Suite 2000, San
Diego, Calif. 92101; (619) 234-4472

Total assets managed	$1,889,000,000
Total discretionary assets	$1,889,000,000
Discretionary tax-exempt	$1,688,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	59
Minimum separate account	$10,000,000
No. of portfolio managers	7

Nicholas-Applegate Capital Management is an active equity and balanced manager specializing in growth stocks and using a bottom-up approach.

Arthur E. Nicholas is chief investment officer; Fred C. Applegate is client contact.

The Nicholson Group Inc.

12000 S.W. 92nd Ave., P.O. Box
56-1065, Miami, Fla. 33256; (305)
252-4090

Total assets managed	$15,000,000
Total discretionary assets	$15,000,000
Discretionary tax-exempt	$2,000,000
Types of accounts managed	C
Tax-exempt clients	3
Minimum separate account	$100,000
No. of portfolio managers	1
Size of research staff	1

The Nicholson Group Inc., an active equity manager, focuses on stocks with undervalued fundamentals. It uses technical analysis to time purchases with stock action and market expectations.

Robert Nicholson is chief investment officer and client contact.

Nikko Capital Management (U.S.A.) Inc.

350 Park Ave., New York, N.Y. 10022;
(212) 319-2730

Total assets managed	$1,838,000,000
Total discretionary assets	$1,684,000,000
Discretionary tax-exempt	$507,000,000
International equity assets	$329,000,000
Equity indexed assets	$178,000,000
Types of accounts managed	CGU
Tax-exempt clients	7
Minimum separate account	$5,000,000
No. of portfolio managers	54
Size of research staff	15

Nikko Capital Management (U.S.A.) Inc. is an active and passive equity, active fixed-income, balanced, tactical asset allocation, active international/global equity and fixed-income, short-term and tilt strategy manager.

It offers active strategies for global, international and Pacific Basin portfolios. Quantitative models are used in the decision-making process. Active fixed-income management is based on interest rate anticipation.

Stanley Kirtman is chief investment officer; David Rochman is client contact.

NKK Scudder Capital Asset Management Corp.

345 Park Ave., New York, N.Y. 10154;
(212) 326-6572

Total assets managed	$177,000,000
Total discretionary assets	$177,000,000
Discretionary tax-exempt	$0
Minimum separate account	$1,000,000
No. of portfolio managers	16
Size of research staff	56

NKK Scudder Capital Asset Management Corp. is an active international equity and balanced manager.

Its equity approach is value-oriented. Stock selection is based on a global perspective with the capture of long-term changes based on fundamental research. In fixed-income, it uses interest rate anticipation and sector analysis.

Takeo Hisada is chief investment officer; Tadao Doshida is client contact.

NM Capital Management Inc.

7510 Montgomery N.E., Albuquerque,
N.M. 87109; (505) 888-9500

Total assets managed	$209,000,000
Total discretionary assets	$209,000,000
Discretionary tax-exempt	$129,000,000
401(k)/457 assets managed	$10,000,000
International equity assets	$15,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	157
Minimum separate account	$350,000
No. of portfolio managers	4
Size of research staff	2

NM Capital Management Inc. is an active equity, passive fixed-income and balanced manager.

Its equity approach is bottom-up, emphasizing low p/e stocks and Graham & Dodd analysis. Its fixed-income approach emphasizes A or better coupon bonds, using interest rate anticipation and sector analysis.

Gerald S. Epstein is chief investment officer; Charles H. Womack and Thomas S. Christopher are client contacts.

NML Equity Services Inc.

720 E. Wisconsin Ave., Milwaukee,
Wis. 53202; (414) 226-1860

Total assets managed	$11,772,000,000
Total discretionary assets	$11,772,000,000
Discretionary tax-exempt	$341,000,000
Types of accounts managed	CF
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	6

NML Equity Services Inc. is an active equity, active fixed-income and balanced manager.

Its equity philosophy emphasizes disciplined, value-oriented investment approaches to both large- and small-cap stocks.

Its fixed-income approach meets duration targets set for each client by selecting bonds from market sectors that are most conservatively valued.

Mark G. Doll is chief investment officer; Thomas A. Carroll is client contact.

Noddings Investment Group

2 MidAmerica Plaza, Suite 920,
Oakbrook Terrace, Ill. 60181; (708)
954-1322

Total assets managed	$84,000,000
Total discretionary assets	$84,000,000
Discretionary tax-exempt	$36,000,000
Types of accounts managed	CFU
Tax-exempt clients	82
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	3

Noddings Investment Group Inc., a convertible securities manager, uses a quantitative approach, identifying and capitalizing on inefficiencies through mathematical evaluation techniques. It uses options and stock index futures.

Thomas C. Noddings is chief investment officer; Carol A. Sachs and Maureen A. Pettersen are client contacts.

Nomura Capital Management

180 Maiden Lane, Suite 2903, New
York, N.Y. 10038; (212) 509-8181

Total assets managed	$2,789,000,000
Total discretionary assets	$2,789,000,000
Discretionary tax-exempt	$2,313,000,000
International equity assets	$2,017,000,000
International fixed-income assets	$82,000,000
International cash assets	$5,000,000
Types of accounts managed	CEFG
Tax-exempt clients	22

Minimum separate equity account	$5,000,000
Minimum separate bond account	$10,000,000
No. of portfolio managers	17
Size of research staff	447

Nomura Capital Management is an active manager of U.S. and international equity, fixed-income and balanced accounts.

The firm uses original fundamental and economic research. Stocks are chosen through disciplined valuation aided by quantitative tools.

In fixed-income, it uses interest rate anticipation, sector analysis, yield curve arbitrage, rich/poor analysis and individual anomalies to tailor portfolios to match a client's risk tolerance.

Takeo Nakamura is chief investment officer. Brian X. Fitzgibbon is client contact.

Steven A. Noroian & Associates Inc.

100 Pine St., Suite 2800, San Francisco, Calif. 94111; (415) 398-8766

Total assets managed	$60,000,000
Discretionary tax-exempt	$40,000,000
Types of accounts managed	CEF
Tax-exempt clients	55
Minimum separate account	$200,000
No. of portfolio managers	4

Steven A. Noroian & Associates Inc. is an active equity, passive fixed-income and balanced manager.

Its equity approach analyzes growth stocks with Graham & Dodd and employs market timing. Its fixed-income approach uses interest rate anticipation and sector analysis, emphasizing maturity structure and quality ratings.

Steven A. Noroian is chief investment officer; Duffy A. Mort is client contact.

North American Capital Management

P.O. Box 6728, Shawnee Mission, Kan. 66206; (913) 381-8401

Total assets managed	$8,000,000
Total discretionary assets	$8,000,000
Discretionary tax-exempt	$3,000,000
Types of accounts managed	CF
Tax-exempt clients	20
Minimum separate account	$80,000
No. of portfolio managers	1

North American Capital Management, an active equity and tactical asset allocation manager, invests in large-cap, blue-chip companies using technical analysis as a preliminary screen. Quantitative and fundamental analysis are used to make the final investment decisions. A top-down process is used to select industries and companies. A similar procedure is used to determine the asset allocation. Options are used for hedging only. Its fixed-income approach is based on interest rate anticipation.

Robert J. McElwain is chief investment officer and client contact.

Northern Capital Management

6510 Grand Teton Plaza, Madison, Wis. 53719; (608) 829-2990

Total assets managed	$1,192,000,000
Total discretionary assets	$1,192,000,000
Discretionary tax-exempt	$1,092,000,000
401(k)/457 assets managed	$100,000,000
Types of accounts managed	CEFU
Tax-exempt clients	66
Minimum separate account	$5,000,000
No. of portfolio managers	6

Northern Capital Management is an active equity and fixed-income, balanced and active global equity manager.

Its equity approach is to maximize capital appreciation within the context of preserving client assets by using market timing and stock selection. Its fixed-income approach uses interest rate anticipation. Options are used.

Richard Moskalik is chief investment officer; Stephen L. Hawk and Roland Reinholtz are client contacts.

Northern Investment Management Co.

200 W. Madison St., Suite 2710, Chicago, Ill. 60606; (312) 606-7300

Total assets managed	$6,179,000,000
Total discretionary assets	$6,179,000,000
Discretionary tax-exempt	$6,124,000,000
International equity assets	$36,000,000
International fixed-income assets	$18,000,000
Equity indexed assets	$1,093,000,000
Fixed-income indexed assets	$777,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	238
Minimum separate account	$5,000,000
No. of portfolio managers	13
Size of research staff	2

Northern Investment Management Co. is an active and passive equity, active and passive fixed-income, balanced, passive international equity, active international fixed-income and short-term manager.

Its equity approach focuses on strong growth companies, following internal or external changes of a company or industry to capitalize on adjustments to market valuations.

Its fixed-income approach is a controlled-risk style that quantifies investment objectives into a benchmark portfolio against which the firm manages. Individual issue arbitrage is employed.

Roger W. Kushla is client contact.

The Northern Trust Co.

50 S. LaSalle, Chicago, Ill. 60675; (312) 630-6000

Total assets managed	$29,275,000,000
Total discretionary assets	$29,275,000,000
Discretionary tax-exempt	$9,163,000,000
Pooled accounts	$9,163,000,000
Tax-exempt clients	391
Types of accounts managed	CEFG
Minimum separate account	$100,000,000
No. of portfolio managers	7
Size of research staff	2

The Northern Trust Co., a short-term manager, uses options and financial futures.

William F. Bahl is chief investment officer; Thomas W. Kimen Jr. is client contact.

Northwest Quadrant Inc.

450 Newport Center Drive, Suite 420, Newport Beach, Calif. 92660; (714) 720-9232

Total assets managed	$62,000,000
Total discretionary assets	$62,000,000
Discretionary tax-exempt	$35,000,000
International equity assets	$14,000,000
Types of accounts managed	CF
Tax-exempt clients	66
Minimum separate account	$200,000
No. of portfolio managers	2
Size of research staff	2

Northwest Quadrant Inc. offers active equity, active fixed-income, balanced and active international equity management.

A hedge equity manager, it uses convertibles, covered options, long stock/long put and closed-end funds.

Roger W. Wilson is chief investment officer; Sherry Lawlor is client contact.

Norwest Capital Management and Trust

Norwest Bank Minnesota, Norwest Center, Minneapolis, Minn. 55479-2059; (612) 667-9524

Total assets managed	$5,137,000,000
Discretionary tax-exempt	$2,584,000,000
401(k)/457 assets managed	$295,000,000
International equity assets	$29,000,000
Equity indexed assets	$119,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	919
Minimum separate account	$1,000,000
No. of portfolio managers	12
Size of research staff	2

Norwest Capital Management and Trust is an active and passive equity, active fixed-income, balanced, tactical asset allocation, active international equity, GIC and short-term manager.

Its equity approach emphasizes individual stock selection of medium- and large-cap growth companies that meet defined valuation criteria.

Its structured maturity fixed-income approach concentrates on intermediate maturities using sector analysis and individual issue selection.

John R. Caswell is chief investment officer and client contact.

Norwest Capital Management & Trust Co.-Montana

P.O. Box 597, Helena, Mont. 59624; (406) 447-2059

Total assets managed	$735,000,000
Total discretionary assets	$662,000,000
Discretionary tax-exempt	$209,000,000
Pooled accounts	$59,000,000
Separate accounts	$150,000,000*
401(k)/457 assets managed	$1,000,000
Tax-exempt clients	
Commingled	268
Separate	155
Types of accounts managed	CEF
Minimum separate account	$500,000
No. of portfolio managers	3

Norwest Capital Management & Trust Co. — Montana is an active equity, passive fixed-income, balanced and short-term manager.

Its equity approach is based on Graham & Dodd analysis to provide above-average dividend yield and capital appreciation. Its core diversified portfolio has quality, larger-cap stocks with emphasis on low price/book, price/sales and consistent dividend growth. Its fixed-income approach emphasizes risk control and high-quality securities.

David L. Roberts is chief investment officer and client contact.

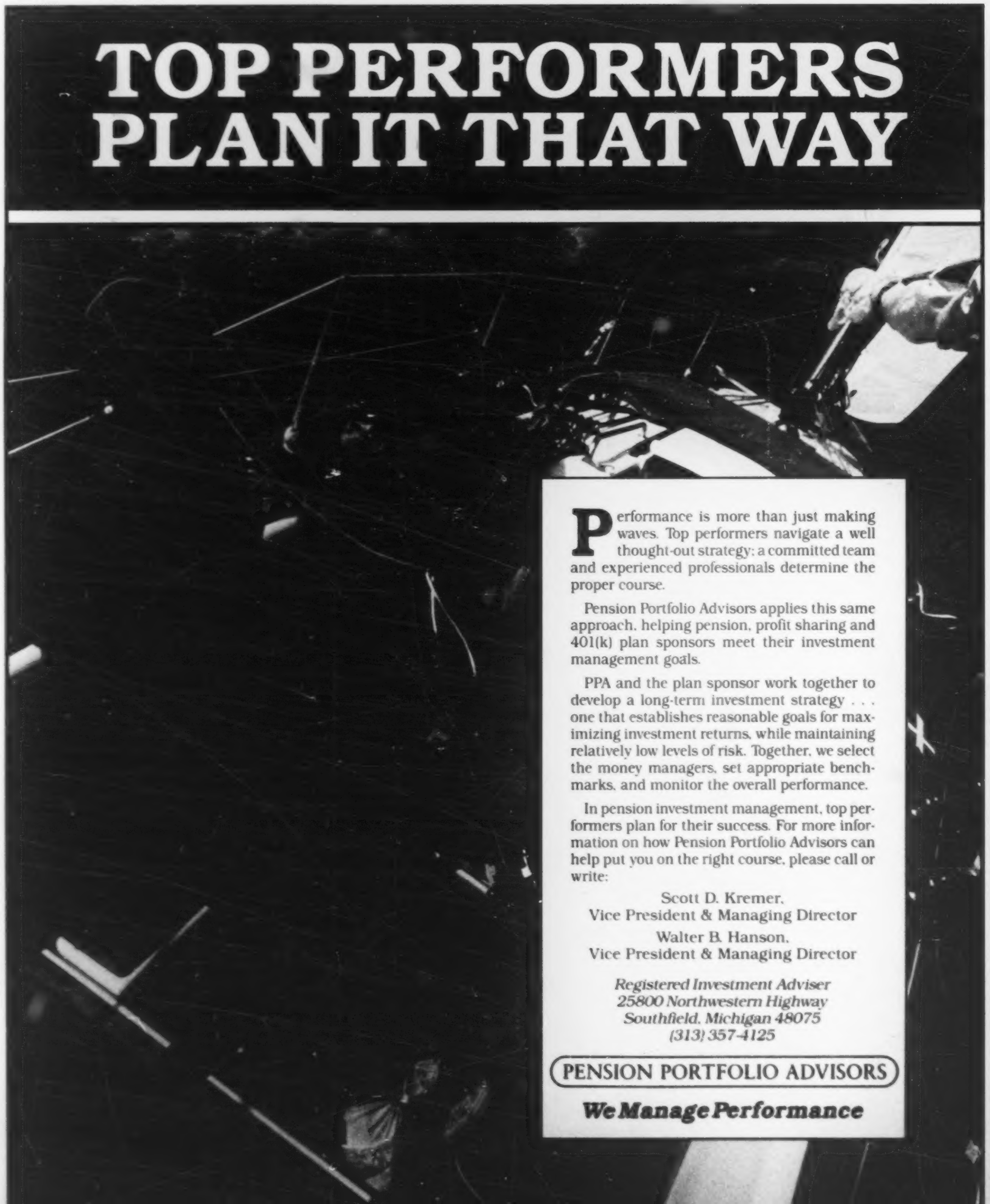
Numeric Investors L.P.

955 Massachusetts Ave., Cambridge, Mass. 02139; (617) 868-1300

Total assets managed	$42,000,000

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: Government
U: Union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Walter B. Hanson,
Vice President & Managing Director

Registered Investment Adviser
25800 Northwestern Highway
Southfield, Michigan 48075
(313) 357-4125

PENSION PORTFOLIO ADVISORS

We Manage Performance

Total discretionary assets	$42,000,000
Discretionary tax-exempt	$27,000,000
Types of accounts managed	FG
Tax-exempt clients	1
No. of portfolio managers	1
Size of research staff	1

Numeric Investors L.P. is an active equity manager.

Its equity approach uses growth stocks and is value-oriented. It uses a quantitative methodology employing an earnings indicator of analysts trend as well as a valuation indicator with market economic sector weights.

Langdon B. Wheeler is chief investment officer and client contact.

NWQ Investment Management Co.

655 S. Hope St., 11th Floor, Los Angeles, Calif. 90017; (213) 624-6700

Total assets managed	$2,291,000,000
Total discretionary assets	$2,291,000,000
Discretionary tax-exempt	$1,571,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	219
Minimum separate account	$2,000,000
No. of portfolio managers	7
Size of research staff	1

NWQ Investment Management Co. is an active equity and balanced manager.

Its equity strategy emphasizes active asset changes, industry sector concentration and stock selection to produce above-market returns with substantially less risk.

Its active fixed-income approach has a total-return orientation. The firm extends or shortens maturities in anticipation of changes in interest rates.

David A. Polak is chief investment officer; James P. Owen is client contact.

Pensions & Investments' annual survey of money managers' foreign business will be published in the July 23 issue.

O

Oak Associates

1755 Merriman Road, Suite 250, Akron, Ohio 44313; (216) 836-7766

Total assets managed	$514,000,000
Total discretionary assets	$514,000,000
Discretionary tax-exempt	$437,000,000
Types of accounts managed	CEF
Tax-exempt clients	87
Minimum separate account	$5,000,000
No. of portfolio managers	1

Oak Associates, an active equity and balanced manager, seeks to maximize returns over a market cycle through investment in the firm's "best ideas." Value is seen in both relative and absolute terms.

James D. Oelschlager is chief investment officer; James C. Vogelzang is client contact at (303) 629-1900.

Oak Hall Capital Advisors

122 E. 42nd St., New York, N.Y. 10168; (212) 972-1293

Total assets managed	$125,000,000
Total discretionary assets	$124,000,000
Discretionary tax-exempt	$79,000,000
International equity assets	$3,000,000
Types of accounts managed	CEF
Tax-exempt clients	5
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	3

Oak Hall Capital Advisors Inc., an active equity manager, emphasizes out-of-favor, small- to medium-cap issues whose price, earnings and market sponsorship are in a downward trend. Certain catalysts have been identified that will enhance valuation.

John C. Hathaway is chief investment officer; John J. Hock is client contact.

Oakwood Counselors Inc.

50 Highway Nine, Morganville, N.J. 07751; (201) 536-9552

Total assets managed	$56,000,000
Total discretionary assets	$56,000,000
Total discretionary tax-exempt	$13,000,000
Types of accounts managed	CF
Tax-exempt clients	18
Minimum separate account	$250,000
No. of portfolio managers	3

Oakwood Counselors Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach uses conceptual investing, buying beneficiaries of secular trends taking place.

Its fixed-income approach anticipates credit spreads and interest rate curves to achieve greatest possible return within risk parameters.

Paul J. Sherman is chief investment officer; Kenneth H. Mantel is client contact.

The O'Connor Group

200 Park Ave., New York, N.Y. 10166; (212) 687-7420

Total assets managed	$2,000,000,000
Total discretionary assets	$2,000,000,000
Discretionary tax-exempt	$1,600,000,000
Equity real estate assets	$1,600,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	21
Minimum separate account	$100,000,000
No. of portfolio managers	4
Size of research staff	2

The O'Connor Group, a real estate manager, invests in large transactions with franchise characteristics, such as center city office buildings and regional shopping centers. The firm acts as investment manager for institutional clients on a separate account basis and through commingled funds, and maintains property management capabilities in-house.

Jeremiah W. O'Connor Jr. is chief investment officer; Nancy Lashine is client contact.

Oechsle International Advisors

1 International Place, Boston, Mass. 02110; (617) 330-8810

Total assets managed	$1,838,000,000
Total discretionary assets	$1,838,000,000
Discretionary tax-exempt	$1,788,000,000
401(k)/457 assets managed	$990,000,000
International equity assets	$1,788,000,000
Types of accounts managed	CEFG
Tax-exempt clients	39
Minimum separate account	$20,000,000
No. of portfolio managers	6
Size of research staff	3

Oechsle International Advisors is an active international/global equity manager.

Its equity approach emphasizes bottom-up stock selection, aggressive top-down country allocation and value orientation. The investment horizon is 18 to 24 months; portfolios are constructed with a limited number of holdings; investments are managed in a minimum of eight and a maximum of 12 country markets.

Walter Oechsle is chief investment officer; Stephen P. Langer is client contact.

O'Herron & Co. Inc.

1300 St. Mary's St., Suite 210, Raleigh, N.C. 27605; (919) 834-9224

Total assets managed	$42,000,000
Total discretionary assets	$22,000,000
Total discretionary tax-exempt	$22,000,000
Types of accounts managed	CF
Tax-exempt clients	23
Minimum separate account	$500,000
No. of portfolio managers	2

O'Herron & Co. Inc. is an active equity and balanced manager.

Its equity approach emphasizes both growth and value, characterized by above-average revenue and earnings growth, relatively low p/e ratios, good cash flow and strong balance sheets. The firm specializes in investments in the Carolinas, Georgia and Virginia.

James J. Green is chief investment officer and client contact.

The Ohio Co.

155 E. Broad St., Columbus, Ohio 43215; (614) 464-5545

Total assets managed	$1,426,000,000
Discretionary tax-exempt	$451,000,000
401(k)/457 assets managed	$20,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	92
Minimum separate account	$1,000,000
No. of portfolio managers	6
Size of research staff	9

The Ohio Co. is an active equity and fixed-income and balanced manager.

Its primary equity approach buys stock with long-term track records of above-average earnings and dividend growth, superior ROE trends, priced at a discount to the S&P 500 p/e multiple.

Its fixed-income approach uses interest rate anticipation and is defensive, buying only A rated or higher, primarily government or government-backed securities of intermediate maturity.

C.A. Peterson is chief investment officer; Allen B. Maust is client contact.

Old Kent Bank and Trust Co.-Investment Management Group

1 Vandenberg Center, Grand Rapids, Mich. 49503; (616) 771-5113

Total assets managed	$6,500,000,000
Total discretionary assets	$6,500,000,000
Discretionary tax-exempt	$3,250,000,000
Pooled accounts	$2,250,000,000
Separate accounts	$1,000,000,000
401(k)/457 assets managed	$100,000,000
Real estate equity assets	$20,000,000
Equity indexed assets	$250,000,000
Dedicated/immunized assets	$250,000,000
Tax-exempt clients:	
Commingled	925
Separate	60
Types of accounts managed	CEFGU
Minimum separate account	$2,000,000
No. of portfolio managers	20
Size of research staff	8

Old Kent Bank and Trust Co. — Investment Management Group is an active and passive equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

Its equity style uses value-oriented, quantitative screens to find undervalued securities with earnings momentum. Its fixed-income approach uses a quantitative model to assess probabilities of longer duration securities outperforming shorter duration securities. Financial futures are used.

Joseph T. Keating is chief investment officer; Larry Pinckney is client contact.

Olympic Capital Management Inc.

3320 Rainier Tower, Seattle, Wash. 98101; (206) 447-9399

Total assets managed	$2,267,000,000
Total discretionary assets	$2,267,000,000
Discretionary tax-exempt	$2,267,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	61
Minimum separate account	$20,000,000
No. of portfolio managers	5
Size of research staff	1

Olympic Capital Management Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach uses sector rotation and Graham & Dodd analysis. Its fixed-income approach uses interest rate anticipation and sector analysis.

John S. Crowl is chief investment officer and client contact.

One Federal Asset Management

1 Federal St., Boston, Mass. 02211; (617) 292-3771

Total assets managed	$2,851,000,000
Total discretionary assets	$2,213,000,000
Total discretionary tax-exempt	$1,295,000,000
401(k)/457 assets managed	$291,000,000
Dedicated/immunized assets	$4,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	27
Minimum separate account	$3,000,000
No. of portfolio managers	13
Size of research staff	1

One Federal Asset Management is an active equity, active fixed-income, balanced and short-term manager.

Its growth-oriented equity approach uses a bottom-up, fundamental stock selection process. In fixed income, it uses risk-controlled active bond management to establish a benchmark to meet client objectives.

Bradford J. Johnson is chief investment officer; Albert R. Vandam is client contact.

Oppenheimer Capital

Oppenheimer Tower, World Financial Center, New York, N.Y. 10281; (212) 667-7512

Total assets managed	$18,429,000,000
Total discretionary assets	$13,417,000,000
Discretionary tax-exempt	$13,250,000,000
401(k)/457 assets managed	$100,000,000
International equity assets	$380,000,000
Dedicated/immunized assets	$218,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	463
Minimum separate equity account	$5,000,000
Minimum separate bond account	$10,000,000
No. of portfolio managers	23
Size of research staff	5

Oppenheimer Capital is an active equity, active fixed-income, balanced, tactical asset allocation, short-term and mutual funds manager.

Its equity approach focuses on elements of value that include business segments, undedicated cash flow and hidden assets. Asset allocation is determined by analyzing financial liquidity and levels of market valuation.

In fixed income, the firm looks for sector, maturity and quality groups of the bond market that provide highest yield at lowest price with least risk.

Options and stock index futures are used as separate investment products.

George Long is chief investment officer; Frank P.L. Minard is client contact.

P

Pacific Century Advisers Inc.

300 S. Grand Ave., Suite 2200, Los Angeles, Calif. 90071; (800) 332-9191

See entry for SECURITY PACIFIC INVESTMENT GROUP.

Pacific Financial Cos.

700 Newport Center Drive, Newport Beach, Calif. 92660; (714) 640-3030

Total assets managed	$8,220,000,000
Total discretionary assets	$8,220,000,000
Discretionary tax-exempt	$5,245,000,000
Pooled accounts	$78,000,000
Separate accounts	$247,000,000
GICs	$2,610,000,000
Annuities	$1,046,000,000
Other	$1,264,000,000
Mortgage assets	$1,310,000,000
International fixed-income assets	$117,000,000
Fixed-income indexed assets	$39,000,000
Dedicated/immunized assets	$3,641,000,000
Tax-exempt clients:	
Pooled	23
Separate	9
Types of accounts managed	CFGU
Minimum separate account	$25,000,000
No. of portfolio managers	6
Size of research staff	9

Pacific Financial Cos., through subsidiaries and business units, offers equity, fixed-income, balanced, international, money market and guaranteed investment products.

William Cvengros is chief investment officer; Daniel Deter is client contact.

The assets of the following units are included in the data above:

•Pacific Mutual Life Insurance Co. manages $5 billion in tax-exempt general account assets. Its products include GICs, funding agreements, guaranteed annuities and a guaranteed fixed-income index fund.

•PM Capital Management manages the assets of Pacific Mutual, and has approximately $250 million in tax-exempt, fixed-income assets under management for outside clients. Its fixed-income approach is designed to manage interest rate risk; yield spreads between securities and among sectors are tracked to exploit inefficiencies or mispricing, and

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The Mid-Year

Investment Bank Rankings

Publishing: July 9th   Advertising Closing: June 26th

The Mid-Year Investment Bank Rankings will be featured in the July 9th issue of *Pensions & Investments*. Included will be rankings for all issues -- domestic and global; debt and equity; asset-backed debt and IPO's.

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extensive credit analysis underpins yield analysis.

•Pacific Financial Asset Management Corp. offers a series of pooled funds. $78 million is managed internally and is included within the assets above. An additional $405 million, not included above, is managed on its behalf by the following investment organizations that are profiled separately: Pacific Investment Management, Parametric Portfolio Associates, Cadence Capital Management, PMRealty Advisors and NFJ Investment Group.

Pacific Financial Research

9601 Wilshire Blvd., Suite 828, Beverly
Hills, Calif. 90210; (213) 278-4461

Total assets managed	$2,658,000,000
Total discretionary assets	$2,658,000,000
Discretionary tax-exempt	$2,418,000,000
Types of accounts managed	CEFG
Tax-exempt clients	60
Minimum separate account	$25,000,000
No. of portfolio managers	6
Size of research staff	2

Pacific Financial Research, an active equity manager, is value-oriented and contrarian, using Graham & Dodd analysis and low p/e securities.

Its fixed-income approach views bonds as equity substitutes and buys when bonds are cheaper than stocks. Portfolios are structured to capture value between stocks and bonds.

James H. Gipson is chief investment officer and client contact.

Pacific Investment Management Co.

840 Newport Center Drive, Suite 360,
Newport Beach, Calif. 92660; (714)
640-3419

Total assets managed	$24,599,000,000
Total discretionary assets	$21,513,000,000
Discretionary tax-exempt	$21,081,000,000
International fixed-income assets	$126,000,000
International cash assets	$49,000,000
Equity indexed assets	$736,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	121
Minimum separate account	$50,000,000
No. of portfolio managers	8
Size of research staff	3

Pacific Investment Management Co. is an active and passive equity, active fixed-income, balanced, international/global active fixed-income and short-term manager.

Its equity approach is contrarian, using quantitative techniques and large-cap growth stocks. Through its valuation methodology, it focuses on seasoned, high-quality companies with consistent above-average earnings growth. Its fixed-income approach is active, seeking value across all sectors. Major swings in duration are avoided. Options, stock index futures and fixed-income futures are used.

William H. Gross is chief investment officer; Jim Muzzy and Margaret Riley are client contacts.

PaineWebber Asset Management

1285 Avenue of the Americas, New
York, N.Y. 10019; (212) 713-1433

Total assets managed	$100,000,000
Total discretionary assets	$100,000,000
Total discretionary tax-exempt	$40,000,000
Types of accounts managed	CFU
Tax-exempt clients	200
Minimum separate account	$100,000
No. of portfolio managers	3

PaineWebber Asset Management is an active equity and balanced manager.

Its equity approach is long term, and has a strong value emphasis. In fixed income, it stresses interest rate anticipation.

Michael D. Jamison is chief investment officer and client contact.

Palley-Needelman Asset Management Inc.

800 Newport Center Drive, Suite 450,
Newport Beach, Calif. 92660; (714)
760-6644

Total assets managed	$522,000,000
Total discretionary assets	$522,000,000
Discretionary tax-exempt	$353,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	99
Minimum separate account	$3,000,000
No. of portfolio managers	6

Palley-Needelman Asset Management Inc. is an active equity and balanced manager.

Its equity approach is value-oriented, focusing on stocks that have low p/e, high yield, low volatility and low expectation, with substantial free cash flow and a strong balance sheet.

Its fixed-income approach focuses on short-term, high-quality cash alternatives.

Roger B. Palley is chief investment officer; Steven M. Borowski and Raymond F. Pentz are client contacts.

Palm Beach Capital Management Ltd.

205 Royal Palm Way, Palm Beach,
Fla. 33480; (407) 655-7255

Total assets managed	$332,000,000
Total discretionary assets	$332,000,000
Discretionary tax-exempt	$30,000,000
Types of accounts managed	CF
Tax-exempt clients	8
Minimum separate account	$2,000,000
No. of portfolio managers	5

Palm Beach Capital Management Ltd. is an active and passive equity, passive fixed-income and balanced manager.

Its equity approach is to buy large-cap growth stocks of capital goods companies with predictable earnings even in adverse economic periods. Options are used. In fixed income, interest rate anticipation is used. Short to intermediate maturities, laddered to smooth interest rate swings, generally are bought.

Thomas M. Keresey is chief investment officer; Floyd L. Wideman Jr. is client contact.

PanAgora Asset Management

1 Boston Place, Boston, Mass. 02108;
(617) 722-7961

Total assets managed	$6,579,000,000
Total discretionary assets	$6,214,000,000
Total discretionary tax-exempt	$5,217,000,000
401(k)/457 assets managed	$147,000,000
International equity assets	$467,000,000
International fixed-income assets	$250,000,000
Equity indexed assets	$3,044,000,000
Fixed-income indexed assets	$853,000,000
Dedicated/immunized assets	$128,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	69
Minimum separate account	$5,000,000
No. of portfolio managers	13

PanAgora Asset Management is an active and passive equity, active and passive fixed-income, tactical asset allocation, active and passive international/global equity and fixed-income and short-term manager.

Its equity and fixed-income approaches are structured and include core quantitative products and passive indexing products. Options, stock index futures and fixed-income futures are used.

Richard A. Crowell is chief investment officer; F. Corning Kenly is client contact.

Paradigm Partners Inc.

405 114th Ave. S.E., Bellevue, Wash.
98004; (206) 453-5227

Total assets managed	$160,000,000
Total discretionary assets	$160,000,000
Discretionary tax-exempt	$145,000,000
Types of accounts managed	CEF
Tax-exempt clients	7
Minimum separate account	$20,000,000

Paradigm Partners Inc. specializes in non-traditional alternative investment strategies that have outperformed the S&P 500 significantly. Investments have annual liquidity and include only marketable, publicly traded securities. Portfolios can be diversified or concentrated in one or more of four categories: low volatility; market neutral; high return; and negative correlation.

Michael E. Dunmire is chief investment officer; George Hambrecht is client contact at (212) 677-9757.

Parametric Portfolio Associates Inc.

701 Fifth Ave., Suite 7310, Seattle,
Wash. 98104; (206) 386-5575

Total assets managed	$781,000,000
Total discretionary assets	$781,000,000
Discretionary tax-exempt	$433,000,000
International equity assets	$312,000,000
Types of accounts managed	CG
Tax-exempt clients	8
Minimum separate account	$10,000,000
No. of portfolio managers	7
Size of research staff	2

Parametric Portfolio Associates Inc. is an active domestic and international/global equity manager using proprietary quantitative methods.

Mark England-Markun is chief investment officer; William F. Cornelius is client contact.

Parker Dillon Carlson & Johnson Inc.

120 W. Third St., Suite 300, Dayton,
Ohio 45402; (513) 223-0600

Total assets managed	$40,000,000
Total discretionary assets	$40,000,000
Total discretionary tax-exempt	$24,000,000
401(k)/457 assets managed	$3,000,000
Types of accounts managed	CEF
Tax-exempt clients	43
Minimum separate account	$1,000,000
No. of portfolio managers	3

Parker Dillon Carlson & Johnson Inc. is an active equity, active and passive fixed-income and balanced manager.

Its equity approach maintains a carefully diversified portfolio of small to midsize companies using a disciplined relative valuation process for buy/sell decisions. Its fixed-income approach maintains a diversified portfolio of U.S. government securities with an average maturity of three years.

Leslie O. Parker III is chief investment officer and client contact.

Parmelee Management Corp.

950 Third Ave., New York, N.Y. 10022;
(212) 753-1597

Total assets managed	$60,000,000
Total discretionary assets	$60,000,000
Discretionary tax-exempt	$48,000,000
401(k)/457 assets managed	$3,000,000
Types of accounts managed	C
Tax-exempt clients	50
Minimum separate account	$1,000,000
No. of portfolio managers	1

Parmelee Management Corp. is an active equity, active fixed-income and balanced manager.

Its eclectic, value-oriented and risk-averse equity approach stresses growth and emerging growth stocks, sector rotation and market timing/tactical asset allocation.

The fixed-income approach is based on interest rate anticipation.

Alfred G. Parmelee is chief investment officer and client contact.

Payden & Rygel

333 S. Grand Ave., Suite 3250, Los
Angeles, Calif. 90071; (213)
625-1900

Total assets managed	$7,000,000,000
Total discretionary assets	$6,757,000,000
Discretionary tax-exempt	$4,590,000,000
401(k)/457 assets managed	$440,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	62
Minimum separate account	$25,000,000
No. of portfolio managers	9
Size of research staff	8

Payden & Rygel is an active fixed-income and short-term manager.

It specializes in managing domestic and global short-term fixed income (zero to five years) with an emphasis on high quality and liquidity.

Joan A. Payden is chief investment officer; Jack E. Reynolds is client contact.

PCM International

751 Broad St., 2-Plaza, Newark, N.J.
07102-3777; (201) 802-4559

Total assets managed	$4,522,000,000
Total discretionary assets	$4,522,000,000
Discretionary tax-exempt	$1,367,000,000
International equity assets	$292,000,000
International fixed-income	$1,075,000,000
Types of accounts managed	CGU
Tax-exempt clients	24
Minimum separate equity account	$10,000,000
Minimum separate bond account	$20,000,000
No. of portfolio managers	9
Size of research staff	3

PCM International is an active international/global equity and fixed-income, and short-term manager.

Its primary equity approach identifies the best earnings prospects relative to current price and avoids stocks exposed to bear markets globally. Defensive currency hedging techniques are used. Its primary fixed-income approach uses active currency and maturity management. It owns government-quality securities in markets that are fundamentally sound. Options and fixed-income futures are used.

Barry Gillman is chief investment officer; J. Eric Nelson is client contact.

Peckham Boston Advisors

4 Longfellow Place, Suite 3305,
Boston, Mass. 02114; (617)
523-4440

Total assets managed	$40,000,000
Discretionary tax-exempt	$40,000,000
Equity real estate assets	$40,000,000
Types of accounts managed	C
Tax-exempt clients	4
Minimum separate account	$1,000,000
No. of portfolio managers	3

Peckham Boston Advisors, a real estate asset manager, emphasizes properties net leased to strong national companies. Parameters include guaranteed fixed income combined with upside potential.

John C. Peckham III is chief investment officer; R. Beeman, of Boston Financial, is client contact.

Pembroke Management Ltd.

1010 Sherbrooke St. W., Suite 818,
Montreal, Quebec H3A 2R7; (514)
848-1991

Total assets managed	$450,000,000
Total discretionary assets	$450,000,000
Discretionary tax-exempt	$300,000,000
For subsidiaries of U.S. firms	$50,000,000
Tax-exempt clients	6
U.S. subsidiaries	1
Types of accounts managed	C
Minimum separate account	$10,000,000
No. of portfolio managers	5

Pembroke Management Ltd., a Canadian firm, is an active equity manager specializing in high-growth equity investments in Canada and the United States. The firm emphasizes investment in owner/entrepreneur-operated, small to midsize companies.

Ian A. Soutar is chief investment officer; Fred Pye is client contact.

Penn Mutual Life Insurance

Independence Square, Philadelphia,
Pa. 19172; (215) 625-5000

Total assets managed	$5,866,000,000
Total discretionary assets	$5,866,000,000
Discretionary tax-exempt	$2,329,000,000
Pooled accounts	$161,000,000
GICs	$679,000,000
Annuities	$672,000,000
Other	$817,000,000
401(k)/457 assets managed	$60,000,000
Types of accounts managed	C
No. of portfolio managers	7
Size of research staff	6

Penn Mutual Life Insurance Co. is an active equity, active and passive fixed-income and short-term manager.

Its equity approach is to buy growth stocks with low valuations in market sectors with positive relative performance. Allocation to equities is based on capital market analysis. Its fixed-income approach is based on comprehensive capital market analysis to facilitate interest rate anticipation. Sector analysis is used to find relative value.

William V. Ferdinand is chief investment officer; Borden Ayers is client contact.

25 largest mortgage managers

Firm	$ mils.*
Aetna Life	16,877
Prudential Investment	11,456
CIGNA Asset	10,233
Principal Financial	8,681
John Hancock	6,042
Equitable Real Estate	4,409
Massachusetts Mutual	3,658
Alliance Capital	3,213
Aldrich, Eastman & Waltch	3,200
Bankers Trust	3,193
MONY	2,917
Boylston Capital	2,721
Lincoln Nat'l	1,903
J.P. Morgan	1,817
Confederation Life	1,736
New York Life	1,674
Balcor Co.	1,368
Pacific Financial	1,310
McMorgan & Co.	1,100
Latimer & Buck	1,048
Brown Brothers Harriman	790
Equitable Agri-Business	740
Security Pacific	664
ASB Capital	616
Manufacturers Life	550
Total	**91,916**

*Discretionary, tax-exempt assets

Penn Square Management

P.O. Box 1419, Reading, Pa. 19603;
(215) 670-1031

Total assets managed	$250,000,000
Total discretionary assets	$250,000,000
Discretionary tax-exempt	$6,000,000
Types of accounts managed	CU
Tax-exempt clients	40
Minimum separate account	$1,000,000
No. of portfolio managers	1
Size of research staff	3

Penn Square Management Corp. is an active equity, active fixed-income and short-term manager.

Its equity approach is top-down and growth- and value-oriented. It also seeks low p/e, blue chip S&P 500, high-yield/long-term issues; it employs debt-to-capital macroeconomic/industry analysis.

Its fixed-income approach uses interest rate anticipation, focusing on value and intermediate maturities.

James E. Jordan Jr. is chief investment officer; Kevin J. Mailey is client contact.

Penreal Advisors Ltd.

700, 1090 W. Georgia, Vancouver,
B.C. V6E 3V7; (604) 685-8351

Total assets managed	$256,000,000
Total discretionary assets	$256,000,000
Discretionary tax-exempt	$256,000,000
Equity real estate assets	$238,000,000
Mortgage assets	$13,000,000
Tax-exempt clients	66
Types of accounts managed	CGU
No. of portfolio managers	15
Size of research staff	3

Penreal Advisors Ltd., an AMI joint venture, is a Canadian real estate manager.

Its investment approach focuses on the acquisition of income-producing properties and land in major Canadian cities where income and value can be enhanced by property development, improvement, expansion and intensive management.

Walter R. Badun is chief investment officer; Malcolm F. Leitch is client contact.

Pension Management Co.

995 Galleria Financial Center, 5075
Westheimer, Houston, Texas 77056;
(713) 552-1880

Total assets managed	$55,000,000
Total discretionary assets	$55,000,000
Discretionary tax-exempt	$40,000,000
401(k)/457 assets managed	$5,000,000
Types of accounts managed	CG
Tax-exempt clients	100
No. of portfolio managers	2
Size of research staff	3

Pension Management Co. is an active equity, active and passive fixed-income, balanced and convertible manager.

Its primary equity approach uses sector rotation and market timing with growth and low p/e stocks. Its fixed-income approach uses sector analysis.

John H. Lee is chief investment officer; James H. Lee is client contact.

Pension Portfolio Advisors

25800 Northwestern Highway,
Southfield, Mich. 48075; (313)
357-4125

Total assets managed	$342,000,000
Tax-exempt assets managed:	
Total	$342,000,000
Assigned to other firms	$342,000,000
Types of accounts managed	CGU
Tax-exempt clients	665
Minimum separate account	$200,000
No. of portfolio managers	7
Size of research staff	2

Pension Portfolio Advisors is a manager of managers. Of the assets above, $260 million is passed to its parent company, Maccabees Life Insurance Co. for management; the balance is run by external managers.

Active and passive equity, balanced and passive international/global equity products are offered through external managers. Passive, growth stock and equity income strategies are employed. The fixed-income approaches offered are based upon interest rate anticipation, sector analysis, maturity and quality.

Donald I. Gregg is chief investment officer; Carole Beauchemin is client contact.

Peregrine Capital Management Inc.

512 Nicollet Mall, Suite 830,
Minneapolis, Minn. 55402; (612)
343-7600

Total assets managed	$1,078,000,000
Total discretionary assets	$1,078,000,000
Discretionary tax-exempt	$904,000,000
401(k)/457 assets managed	$45,000,000
Mortgage assets	$66,000,000
International equity assets	$16,000,000
Types of accounts managed	CEGU
Tax-exempt clients	20
Minimum separate account	$5,000,000
No. of portfolio managers	6

Peregrine Capital Management Inc. is an active equity, active fixed-income and portfolio insurance manager.

Its equity approach uses an aggressive, emerging-growth style seeking information gaps in small companies with potential for price appreciation. Its growth style seeks high-quality stocks.

The total return fixed-income approach uses below-market durations to control volatility and emphasizes high-credit-quality issues to provide safety while searching for innovative features to enhance returns. The positive return approach combines appreciation potential with a floor.

Robert B. Mersky is chief investment officer; Derek G. Hepworth is client contact.

Perkins Capital Management

708 E. Lake St., Wayzata, Minn.
55391-1713; (612) 473-8367

Total assets managed	$50,000,000
Total discretionary assets	$50,000,000
Discretionary tax-exempt	$20,000,000
Types of accounts managed	C
Tax-exempt clients	18
Minimum separate account	$100,000
No. of portfolio managers	1
Size of research staff	2

Perkins Capital Management Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach emphasizes market timing and stock selection. It seeks unrecognized, transitional companies for underlying higher earnings and higher p/e ratios. Its fixed-income approach seeks maximum income consistent with perceived quality rating with interest rate anticipation.

Richard W. Perkins is chief investment officer; Harry A. Lindberg Jr. is client contact.

Peters, Gamm, West & Vincent Inc.

8100 E. 22nd St., Bldg. 800, Wichita,
Kan. 67226; (316) 687-2143

Total assets managed	$1,073,000,000
Total discretionary assets	$807,000,000
Discretionary tax-exempt	$680,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	16
Minimum separate account	$5,000,000
No. of portfolio managers	4

Peters, Gamm, West & Vincent Inc., formerly Peters, Gamm & West Inc., is an active fixed-income, short-term and direct placements manager.

It uses economic analysis and projection to anticipate interest rate moves. Fixed-income futures are used.

Don S. Peters is chief investment officer; Kurt Coughenour is client contact.

Petersen, Flynn & Dinsmore

1208 One Market Plaza, San
Francisco, Calif. 94105; (415)
777-0344

Total assets managed	$400,000,000
Discretionary tax-exempt	$300,000,000
Types of accounts managed	CEFG
Tax-exempt clients	17
Minimum separate account	$1,000,000
No. of portfolio managers	3

Petersen, Flynn & Dinsmore is an active equity, active fixed-income and balanced manager.

Its equity approach emphasizes growth and low p/e stocks. Its fixed-income approach is driven by interest rate anticipation.

Don Dinsmore is chief investment officer; Robert Greene is client contact.

Philadelphia Investment Management Group

1616 Walnut St., Philadelphia, Pa.
19103; (215) 545-0079

Total assets managed	$190,000,000

Total discretionary tax-exempt	$160,000,000
401(k)/457 assets managed	$40,000,000
International equity assets	$20,000,000
Types of accounts managed	CEF
Tax-exempt clients	55
Minimum separate account	$250,000
No. of portfolio managers	4
Size of research staff	2

Philadelphia Investment Management Group is an active equity, active fixed-income, balanced and short-term manager.

In equities, the firm uses a quantitative qualitative approach that focuses on cash flow, book value, debt equity ratios and level of institutional ownership. Its fixed-income approach emphasizes interest rate anticipation and sector analysis.

William M. Shettle is chief investment officer and client contact.

Philippe Investment Management Inc.

122 E. 42nd St., New York, N.Y.
10168; (212) 687-3616

Total assets managed	$1,082,000,000
Total discretionary assets	$971,000,000
Discretionary tax-exempt	$539,000,000
International equity assets	$490,000,000
International cash assets	$49,000,000
Types of accounts managed	CFG
Tax-exempt clients	6
Minimum separate account	$25,000,000
No. of portfolio managers	6
Size of research staff	6

Philippe Investment Management Inc., an active international and global equity manager, incorporates both top-down and bottom-up methodologies.

Equal weight is placed on country, sector and stock decisions. Portfolios are diversified with approximately 100 securities, and moderate use is made of cash equivalents. Generally, one-third of the holdings is in smaller-cap issues; 30% to 40% are not in the representative indexes.

Beatrice Philippe is chief investment officer. Claudette Mayer is client contact.

Phillips Hager & North Ltd.

1700-1055 W. Hastings St.,
Vancouver, British Columbia V6E
2H3; (604) 684-4361

Total assets managed	$4,100,000,000
Total discretionary assets	$4,100,000,000
Discretionary tax-exempt	$3,500,000,000
For subsidiaries of U.S. firms	$722,000,000
Tax-exempt clients	75
U.S. subsidiaries	11
Types of accounts managed	CEFGU
Minimum separate account	$10,000,000
No. of portfolio managers	7
Size of research staff	5

Phillips Hager & North Ltd., a Canadian firm, is an active equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

Its equity approach is value-oriented, focusing on consistently strong return on equity without excessive leverage. Its primary fixed-income approach is interest rate anticipation. The key decision is related to duration, but the firm is an active trader doing swaps, arbitrage and other switches.

Richard Bradshaw is chief investment officer; Marina Matei is client contact.

The Phoenix

1 American Row, Hartford, Conn.
06115; (203) 275-5000

Total assets managed	$9,263,000,000
Total discretionary assets	$4,384,000,000
Discretionary tax-exempt	$2,560,000,000
Pooled accounts	$636,000,000
Separate accounts	$746,000,000
GICs	$1,024,000,000
Other	$154,000,000
Equity real estate assets	$426,000,000
Tax-exempt clients:	
Pooled	660
Separate	18
Types of accounts managed	CEGU
Minimum separate account	$10,000,000
No. of portfolio managers	13
Size of research staff	13

The Phoenix is an active equity, active fixed-income, balanced, real estate and short-term manager.

Its equity approach seeks the most earnings growth at the lowest relative price. Loss avoidance is emphasized. In fixed income, interest rate anticipation and sector analysis are used.

In real estate, it makes participating investments in developmental and existing properties in suburban markets, acquiring them at below-market prices and diversifying by geography and property type.

Phillip R. McLoughlin is chief investment officer; Paul A. Atkins is client contact.

Piedmont Capital Management Associates

800 Main St., Suite 200, Hilton Head,
S.C. 29926; (803) 681-9023

Total assets managed	$506,000,000
Total discretionary assets	$506,000,000
Discretionary tax-exempt	$22,000,000
Types of accounts managed	CU
Tax-exempt clients	8
No. of portfolio managers	3

Piedmont Capital Management Associates Inc. is a passive equity, active fixed-income and short-term manager.

Its fixed-income approach is to maximize total return subject to specified risk guidelines. Evaluation is determined by seasonal, cyclical and secular interest rates. Maturity and sector distribution are emphasized.

Walter M. Campbell is chief investment officer; Margot R. McCord is client contact.

Piedmont Realty Advisors

650 California St., San Francisco,
Calif. 94108; (415) 433-4100

Total assets managed	$422,000,000
Total discretionary assets	$422,000,000
Discretionary tax-exempt	$310,000,000
Equity real estate	$98,000,000
Mortgage assets	$212,000,000
Types of accounts managed	CG
Tax-exempt clients	10
Minimum separate account	$15,000,000
No. of portfolio managers	5
Size of research staff	1

Piedmont Realty Advisors, a real estate manager, acquires and manages investment real estate nationally. The primary investment structures are equity joint ventures and participating mortgages.

Robert H. Zerbst is chief investment officer; Don Jackson is client contact.

Pierson Capital Management

Public Ledger Building, Suite 1036,
Philadelphia, Pa. 19106; (215)
625-0188

Total assets managed	$130,000,000
Total discretionary assets	$120,000,000
Discretionary tax-exempt	$30,000,000
401(k)/457 assets managed	$3,000,000
Types of accounts managed	CEF
Tax-exempt clients	20
Minimum separate account	$500,000
No. of portfolio managers	3

Pierson Capital Management Inc., an active equity and balanced manager, has a bottom-up equity approach focusing on low p/e and growth stocks. In fixed income, it uses convertibles and maturity-constrained government obligations.

Daniel E. Devine is chief investment officer; Mark Hanna is client contact.

Pilgrim Baxter Greig & Associates

1255 Drummers Lane, Wayne, Pa.
19087; (215) 341-9000

Total assets managed	$1,213,000,000
Total discretionary assets	$1,213,000,000
Discretionary tax-exempt	$1,213,000,000
Types of accounts managed	C
Tax-exempt clients	13
No. of portfolio managers	3
Size of research staff	4

Pilgrim Baxter Greig & Associates is an active equity manager that focuses on growth stocks.

Gary L. Pilgrim is chief investment officer; Harold J. Baxter is client contact.

PIMS Investment Management Services

P.O. Box 281, Bates Drive,
Pickerington, Ohio 43147; (614)
755-4018

Total assets managed	$256,000,000
Total discretionary assets	$256,000,000
Discretionary tax-exempt	$2,000,000
Types of accounts managed	C
Tax-exempt clients	10
Minimum separate account	$600,000
No. of portfolio managers	2
Size of research staff	1

PIMS Investment Management Services is an active equity, active fixed-income and balanced manager.

Its equity approach is value-oriented, focusing on stocks that are undervalued relative to selected financial and earnings momentum criteria.

Its primary fixed-income approach is based on interest rate anticipation and the risk/reward relationships between market sectors as evidenced by the yield spread over comparable Treasuries.

William G. Henderly is chief investment officer; Theresa Couasnon is client contact.

Pinnacle Associates Ltd.

630 Fifth Ave., Suite 240, New York,
N.Y. 10111; (212) 757-7333

Total assets managed	$520,000,000
Total discretionary assets	$520,000,000
Discretionary tax-exempt	$390,000,000
Types of accounts managed	CEFG
Tax-exempt clients	21
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	2

Pinnacle Associates Ltd. is an active equity and balanced manager.

Its primary equity approach places greatest emphasis on small and midsize companies. The firm uses an opportunistic, bottom-up, often contrary strategy to discover undervalued equities with potential for above-average returns. Its fixed-income approach, used only for balanced accounts, is based on interest rate anticipation. Maturities are limited to seven years and staggered; securities are held until they come due.

Thomas Passios is chief investment officer and client contact.

Pioneering Management

60 State St., Boston, Mass. 02109;
(617) 742-7825

Total assets managed	$7,431,000,000
Total discretionary assets	$7,431,000,000
Discretionary tax-exempt	$597,000,000
Types of accounts managed	CEGU
Tax-exempt clients	8
Minimum separate account	$10,000,000
No. of portfolio managers	8
Size of research staff	10

Pioneering Management Corp. is an active equity and active fixed-income manager.

For equity investments, the firm focuses on small to midsize companies; it maintains a basic value approach, using fundamental, original research with long-term investment horizons.

Its fixed-income approach is based on active duration management, stressing high-quality issues, preservation of principal and a low maturity risk profile.

David D. Tripple is chief investment officer; Z. Andrew Yarumian is client contact.

Piper Capital Management

222 S. Ninth St., Minneapolis, Minn.
55402; (612) 342-6410

Total assets managed	$3,105,000,000
Total discretionary assets	$3,105,000,000
Discretionary tax-exempt	$308,000,000
401(k)/457 assets managed	$4,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	72
Minimum separate account	$3,000,000
No. of portfolio managers	11
Size of research staff	3

Piper Capital Management Inc. is an active equity, active fixed-income, balanced and short-term manager.

The firm is a fundamental value equity investor, basing valuation on an internal earnings payback analysis. Risk is controlled by measuring sensitivity analysis against six key macroeconomic factors.

In fixed-income, the firm is a duration manager. Only investment-grade bonds are considered, and portfolio duration will vary by 50% from the benchmark index.

Paul Dow is chief investment officer; John J. Gibas is client contact.

Pittsburgh National Bank

Fifth Avenue and Wood Street, PBN
Building, Third Floor, Pittsburgh, Pa.
15265; (412) 762-3773

Total assets managed	$12,779,000,000
Total discretionary assets	$6,221,000,000
Discretionary tax-exempt	$2,899,000,000
Pooled accounts	$622,000,000
Separate accounts	$2,277,000,000
401(k)/457 assets managed	$337,000,000
International equity assets	$40,000,000
International fixed-income assets	$5,000,000
Equity indexed assets	$52,000,000
Tax-exempt clients:	
Commingled	427
Separate	112
Types of accounts managed	CEFGU
Minimum separate account	$1,000,000
No. of portfolio managers	7
Size of research staff	18

Pittsburgh National Bank is an active and passive equity, active and passive fixed-income, balanced, active international/global equity and short-term manager.

Its equity approach is multifaceted, but primarily sector rotation. Its fixed-income approach uses interest anticipation and sector spread analysis.

John Martin is chief investment officer; Donald Kendrick is client contact.

Platner & Associates

462 Walnut St., Allentown, Pa. 18102;
(215) 821-0160

Total assets managed	$25,000,000
Total discretionary assets	$9,000,000
Discretionary tax-exempt	$4,000,000
Types of accounts managed	C
Tax-exempt clients	9
Minimum separate account	$100,000
No. of portfolio managers	1
Size of research staff	1

Platner & Associates is an active equity, passive fixed-income and balanced manager.

Its equity approach uses quality growth stocks, emerging growth and sector rotation. Fundamental analysis underscores stock selection, with an emphasis on asset allocation into various sectors as market conditions change. Its primary fixed-income approach is based on interest rate anticipation.

Robert F. Platner is chief investment officer and client contact.

PMRealty Advisors Inc.

800 Newport Center Drive, Suite 300,
Newport Beach, Calif. 92660; (714)
721-5000

Total assets managed	$495,000,000
Total discretionary assets	$495,000,000
Discretionary tax-exempt	$438,000,000
Equity real estate assets	$438,000,000
Types of accounts managed	CEGU
Tax-exempt clients	33
Minimum separate account	$20,000,000
Size of research staff	5

PMRealty Advisors Inc., a real estate manager, follows a research-driven approach. Insulation of investment risk is a primary objective and is exemplified by the firm's development of specialty niche products and active portfolio management techniques.

Jim McWalters is chief investment officer; Pete Hammer is client contact.

25 largest bond indexers

Firm	$ mils.*
Wells Fargo	7,180
Mellon Bond	6,658
Lincoln Capital	3,933
Mellon Capital	3,315
Bankers Trust	3,301
State Street Bank	2,900
T. Rowe Price Associates	2,830
Lehman Ark	1,900
WR Lazard	1,607
ANB investment	1,400
Prudential Fixed Income	1,292
Putnam	1,231
Security Capital	1,070
PanAgora Asset	853
Northern Investment	777
Smith Barney Capital	768
Fidelity Mgmt. Trust	615
Mitchell Hutchins	586
Chase Investors	531
BEA Associates	458
Atlantic Portfolio	431
Ryan Labs	412
First Wisconsin Trust	350
Aetna Life	297
Security Pacific	290
Total	**44,985**

*Discretionary, tax-exempt assets

Portfolio Capital Management Inc.

5950 Fairview Road, Suite 610,
Charlotte, N.C. 28210; (704)
552-0073

Total assets managed	$300,000,000
Total discretionary assets	$62,000,000
Discretionary tax-exempt	$39,000,000
401(k)/457 assets managed	$500,000
Types of accounts managed	CEF
Tax-exempt clients	18
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	1

Portfolio Capital Management Inc. is an active equity, active and passive fixed-income and balanced manager.

Its equity approach focuses on stocks with below-average p/e ratios and with favorable earnings momentum. It uses Graham & Dodd analysis.

Its fixed-income approach uses staggered maturities, with a weighted average maturity of two to five years depending on its interest rate forecast.

R. Hatten Hodges Jr. is chief investment officer; Marc J. Durica is client contact.

The Portfolio Group

30 Rockefeller Plaza, New York, N.Y.
10112; (212) 621-2370

Total assets managed	$2,042,000,000
Total discretionary assets	$2,042,000,000
Total discretionary tax-exempt	$359,000,000
401(k)/457 assets managed	$25,000,000
Types of accounts managed	CEF
Tax-exempt clients	210
Minimum separate account	$500,000
No. of portfolio managers	11
Size of research staff	2

The Portfolio Group is an active equity, active fixed-income, balanced and short-term manager.

Its value/growth equity screening discipline identifies companies with superior returns on investment whose stocks sell at reasonable valuations.

Its fixed-income approach uses disciplined management, adjusting duration depending upon its three- to six-month interest rate forecast.

Timothy J. Morris is chief investment officer; Carol S. Husted is client contact.

Portfolio Timing Inc.

1102 Broadway Plaza, Suite 402,
Tacoma, Wash. 98402; (206)
383-1676

Total assets managed	$19,000,000
Total discretionary assets	$19,000,000
Discretionary tax-exempt	$16,000,000
401(k)/457 assets managed	$2,000,000
Types of accounts managed	C
Tax-exempt clients	250
Minimum separate account	$50,000
No. of portfolio managers	1

Portfolio Timing Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is a 100% movement of assets between no-load equity mutual funds and money market funds using a proprietary timing model. Its fixed-income approach is to move between long-term no-load bond funds and money market funds.

Carl J. Kludt is chief investment officer; Les Cathersal is client contact.

Posthorn Global Asset Management

31 W. 52nd Street, New York, N.Y.
10019; (212) 767-3090

Total assets managed	$2,049,000,000
Total discretionary assets	$2,049,000,000
Discretionary tax-exempt	$309,000,000
International equity assets	$224,000,000
International fixed-income assets	$85,000,000
Types of accounts managed	CF
Tax-exempt clients	8
Minimum separate account	$15,000,000
No. of portfolio managers	13
Size of research staff	3

Posthorn Global Asset Management is an active international/global equity and fixed-income manager.

Its equity approach is thematic, using valuation screens to select attractively priced companies benefiting from these themes. Its fixed-income approach is based on active currency and interest rate bets, controlling risk-and-return trade-offs. Options and fixed-income futures are used.

Pauline Barrett is chief investment officer; Heath McLendon is client contact.

Potomac Asset Management

5247 Wisconsin Ave. N.W.,
Washington, D.C. 20015; (202)
364-6900

Total assets managed	$154,000,000
Total discretionary assets	$154,000,000
Discretionary tax-exempt	$136,000,000
Types of accounts managed	CEFU
Tax-exempt clients	27
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	1

Potomac Asset Management Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is bottom-up, value-oriented and risk averse, using Graham & Dodd analysis to screen for growth, emerging growth or special situation stocks. An earnings-yield screen is used. Its fixed-income approach uses economic analysis and forecasting to determine interest sensitivity of the portfolio. Maturity selections are based on yield curve. All corporate assets are available for swapping.

Peter Ladd Gilsey is chief investment officer; Howard McK. Tucker is client contact.

Premier Investment Advisors

201 St. Charles Ave., Suite 4318, New
Orleans, La. 70170; (504) 582-1234

Total assets managed	$498,000,000
Total discretionary assets	$498,000,000
Discretionary tax-exempt	$367,000,000
Types of accounts managed	CF
Minimum separate account	$3,000,000
No. of portfolio managers	5

Premier Investment Advisors is an active equity, active fixed-income, balanced and short-term manager.

It uses a disciplined selection process to screen equity issues by p/e to achieve the optimal level of return and risk. For fixed-income investments, the average dollar-weighted maturity is managed within a seven- to 12-year range. Government and agency issues are used primarily, with portfolios upgraded/downgraded depending on sector spreads and lengthened/shortened depending on interest rate forecasts.

Donald E. Allred is chief investment officer; Kennard B. Ross is client contact.

Prescott Asset Management

1331 Euclid Avenue, Cleveland, Ohio
44115; (216) 696-3360

Total assets managed	$1,800,000,000
Total discretionary assets	$1,800,000,000
Discretionary tax-exempt	$610,000,000
Dedicated/immunized assets	$350,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	148
Minimum separate account	$1,000,000
No. of portfolio managers	7

Prescott Asset Management is an active equity, active fixed-income, balanced, short-term and no-load mutual fund manager.

Its equity approach is to combine risk averse, value-oriented stocks selection of mainstream companies with a meaningful allocation to special niche growth situations. Strict share price discipline is observed.

In fixed-income, portfolios are built to meet the optimum weighted duration based on trend forecasts. Sector analysis is then considered for the best return in each segment of the maturity spectrum.

Raymond M. Druhot is chief investment officer; Christopher S. Cowlin is client contact.

T. Rowe Price Associates

100 E. Pratt St., Baltimore, Md. 21202;
(301) 547-2000

Total assets managed	$24,900,000,000
Total discretionary assets	$24,485,000,000
Discretionary tax-exempt	$9,395,000,000
401(k)/457 assets managed	$1,415,000,000
Equity real estate assets	$115,000,000
Equity indexed assets	$300,000,000
Fixed-income indexed assets	$2,830,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	110
Minimum separate account	$5,000,009
No. of portfolio managers	20
Size of research staff	34

T. Rowe Price Associates Inc. is an active and passive equity, active and passive fixed-income, balanced and short-term manager. Real estate management is offered through its subsidiary.

It offers a range of active and semi-passive strategies. Internal fundamental research is used to identify trends and companies of interest.

Its active fixed-income approach uses economic analysis, interest rate anticipation and duration analysis. In-house credit research helps avoid volatility.

George J. Collins is chief investment officer; Charles H. Salisbury Jr. is client contact.

•T. Rowe Price Realty Advisers Inc. manages $115 million in tax-exempt assets.

It invests in income-producing, commercial properties using active portfolio and asset management to achieve stable income and enhance appreciation potential.

Reid G. Samuelson is chief investment officer; Laura C. Sorce is client contact.

Rowe Price-Fleming International Inc.

100 E. Pratt St., Baltimore, Md. 21202;
(301) 547-2141

Total assets managed	$3,756,000,000
Total discretionary assets	$3,756,000,000
Discretionary tax-exempt	$3,063,000,000
401(k)/457 assets managed	$20,000,000
International equity assets	$2,573,000,000
International fixed-income assets	$306,000,000
International cash assets	$184,000,000
Types of accounts managed	CEFG
Tax-exempt clients	21
Minimum separate account	$20,000,000
No. of portfolio managers	11

Rowe Price-Fleming International Inc. is an active international/global equity and active and passive international/global fixed-income manager.

Its equity approach uses top-down/bottom-up methods and country selection as key componenets of its overall investment strategy. Its fixed-income approach applies an analysis of interest and exchange rate movements over a short and intermediate range to obtain a balance between income and capital appreciation. Options and fixed-income futures are used.

Martin G. Wade is chief investment officer; George A. Murnaghan is client contact.

T. Rowe Price Guaranteed Asset Advisers Inc.

4435 Waterfront Drive, Suite 306, Glen
Allen, Va. 23060; (804) 346-0227

Total assets managed	$1,825,000,000
Total discretionary assets	$1,825,000,000
Discretionary tax-exempt	$1,825,000,000
401(k)/457 assets managed	$1,510,000,000
Types of accounts managed	CGU
Tax-exempt clients	20
Minimum separate account	$25,000,000
No. of portfolio managers	3

T. Rowe Price Guaranteed Asset Advisers Inc., an active guaranteed investment contracts manager, seeks stable and consistent investment returns while minimizing portfolio risk and administrative burdens. GICs, bank investment contracts and short-term fixed-income securities are used.

Kenneth L. Walker is chief investment officer.

T. Rowe Price Realty Advisors Inc.

515 S. Flower St., 31st Floor, Los
Angeles, Calif. 90071; (213)
239-8800

See entry for T. ROWE PRICE ASSOCIATES.

PRIFORM Investment Management

751 Broad St., Newark, N.J. 07102;
(201) 802-6200

Total assets managed	$1,951,000,000
Total discretionary assets	$1,951,000,000
Discretionary tax-exempt	$1,928,000,000
Types of accounts managed	CGU
Tax-exempt clients	72
Minimum separate account	$10,000,000
No. of portfolio managers	2
Size of research staff	3

PRIFORM Investment Management, an active equity manager, uses a quantitative value-oriented approach to invest in large-cap (S&P 500) stock with good fundamentals earnings that are selling at attractive relative prices.

Roger E. Ford is chief investment officer; Steven A. Bloom is client contact.

PRIMA Corp.

27777 Inkster Road, P.O. Box 9065,
MC 10-84, Farmington Hills, Mich.
48018; (313) 473-3300

Total assets managed	$215,000,000
Total discretionary assets	$215,000,000
Total discretionary tax-exempt	$72,000,000
401(k)/457 assets managed	$2,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	38
Minimum separate account	$1,000,000
No. of portfolio managers	2

PRIMA Corp. is an active equity, active fixed-income and short-term manager.

The firm's long-term, value-oriented equity approach is quantitative, assigning buy and sell prices based on past p/es and expected earnings. It analyzes price movements of Treasuries over historical periods to identify repeatable patterns that correlate with strong performance periods.

Josef Blass is chief investment officer; Barbara K. Baker is client contact.

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: Government
U: Union

PRIMCO Capital Management Inc.

101 S. Fifth St., Suite 2150, Louisville,
Ky. 40202; (502) 589-2011

Total assets managed	$7,500,000,000
Total discretionary assets	$7,500,000,000
Discretionary tax-exempt	$7,500,000,000
401(k)/457 assets managed	$6,375,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	37
Minimum separate account	$20,000,000
No. of portfolio managers	5
Size of research staff	9

PRIMCO Capital Management Inc. is a guaranteed return manager.

Its investment approach concentrates on sector and issuer analysis, and seeks maximized GIC yields in all interest rate environments through minimizing or eliminating risk charges that would otherwise be assessed the portfolio.

Vernon S. Hodge is chief investment officer; John J. Monahan is client contact.

PRIMECAP Management Co.

225 S. Lake Ave., Suite 400,
Pasadena, Calif. 91101-3005; (818)
304-9222

Total assets managed	$2,465,000,000
Total discretionary assets	$2,465,000,000
Discretionary tax-exempt	$2,186,000,000
Types of accounts managed	CEF
Tax-exempt clients	18
No. of portfolio managers	4
Size of research staff	2

PRIMECAP Management Co., an active equity manager, uses fundamental analysis with growth stocks and sector rotation. It has a value orientation and a focus on long-term capital growth.

Howard B. Schow is chief investment officer; Mitchell J. Milias is client contact.

Princeton Bank and Trust

65 Madison Ave., Morristown, N.J.
07960; (201) 285-2287

Total assets managed	$2,999,000,000
Total discretionary assets	$2,520,000,000
Discretionary tax-exempt	$324,000,000
Separate accounts	$324,000,000
401(k)/457 assets managed	$70,000,000
Tax-exempt clients	250
Types of accounts managed	CEFU
Minimum separate account	$1,000,000
No. of portfolio managers	13
Size of research staff	3

Princeton Bank and Trust Co. is an active equity, active fixed-income and balanced manager.

In equities, it has a long-term, fundamental orientation, focusing on superior earnings growth and stability, market leadership, low debt and increasing return on equity. Its fixed-income approach uses interest rate anticipation, specializing in short- to intermediate-term maturities with a maximum average life of seven years and an A rating.

Francis B. Lane is chief investment officer; Daniel P. Dunn is client contact.

Princeton Investment Management Co.

15 Roszel Road, Princeton, N.J.
08540; (609) 452-7010

Total assets managed	$77,000,000
Total discretionary assets	$77,000,000
Discretionary tax-exempt	$17,000,000
International equity assets	$2,000,000
Types of accounts managed	CEF
Tax-exempt clients	11
Minimum separate account	$250,000
No. of portfolio managers	1

Princeton Investment Management Co. is an active equity, active fixed-income and balanced manager.

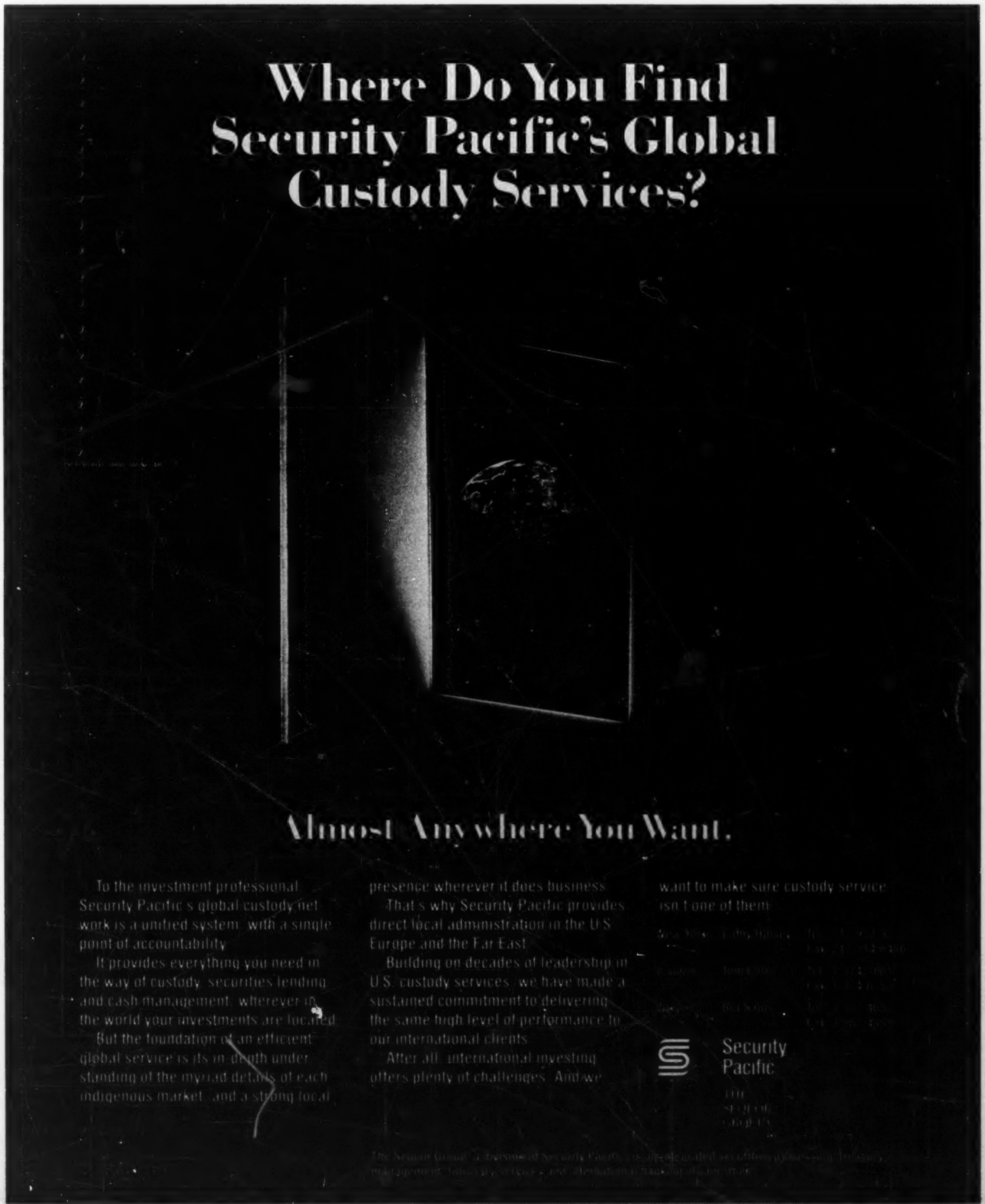
Its equity approach is value oriented and uses Graham & Dodd analysis and low p/e ratio screens. Its fixed-income approach uses sector analysis and interest rate anticipation. Options are used.

William Primm is chief investment officer.

The Principal Financial Group

711 High St., Des Moines, Iowa
50392; (515) 247-6791

Total assets managed	$25,617,000,000
Total discretionary assets	$25,617,000,000
Discretionary tax-exempt	$18,605,000,000
Pooled accounts	$3,945,000,000
Separate accounts	$345,000,000
GICs	$6,993,000,000
Annuities	$1,491,000,000
Other	$5,831,000,000
401(k)/457 assets managed	$4,957,000,000
Equity real estate assets	$148,000,000
Mortgage assets	$8,681,000,000
International equity assets	$53,000,000
Tax-exempt clients:	
Pooled	10,000
Separate	12
Types of accounts managed	CGU


Where Do You Find Security Pacific's Global Custody Services?

Almost Anywhere You Want.

To the investment professional, Security Pacific's global custody network is a unified system, with a single point of accountability.

It provides everything you need in the way of custody, securities lending and cash management, wherever in the world your investments are located.

But the foundation of an efficient global service is its in-depth understanding of the myriad details of each indigenous market, and a strong local presence wherever it does business.

That's why Security Pacific provides direct local administration in the U.S., Europe and the Far East.

Building on decades of leadership in U.S. custody services, we have made a sustained commitment to delivering the same high level of performance to our international clients.

After all, international investing offers plenty of challenges. And we want to make sure custody service isn't one of them.

Security Pacific

Minimum separate equity account	$10,000,000
No. of portfolio managers	8
Size of research staff	35

The Principal Financial Group is an active equity, active fixed-income, asset allocation, real estate, active international equity and short-term manager.

The Principal manages international equity using a value-oriented approach. Its fixed-income approach is fundamental, using both public and private markets and focusing on interest rates, credit risk, maturities and terms.

Its real estate approach emphasizes newly constructed, fully-leased buildings of less than $30 million. It focuses on low leverage with national diversification.

Roy Ehrle is chief investment officer. Dan J. Fitzgerrell is client contact.

• Invista Capital Management Inc., an active equity manager, manages $3.801 billion in total assets and $2.722 billion in tax-exempt assets for 12 clients. It provides domestic equity management for The Principal and its assets are included above.

Its equity approach develops investment themes and selects stocks based on expected long-term cash flows. Sector rotation is used.

S. Ralph Kosmicke is chief investment officer and client contact.

Property Capital Associates

1 Post Office Square, Boston, Mass.
02109; (617) 451-2400

Total assets managed	$830,000,000
Total discretionary assets	$830,000,000
Discretionary tax-exempt	$830,000,000
Equity real estate assets	$830,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	39
Minimum separate account	$25,000,000
No. of portfolio managers	4

Property Capital Associates, a real estate manager, invests selectively in major income-producing properties nationwide. It seeks relatively high yields and inflation protection through increases in current returns and long-term capital values.

Anthony D. Fox is chief investment officer. Gary R. Schwandt is client contact.

Provident Capital Management Inc.

1700 Market St., Suite 2720,
Philadelphia, Pa. 19103-3899; (215) 561-6000

Total assets managed	$3,028,000,000
Total discretionary assets	$3,028,000,000
Discretionary tax-exempt	$3,028,000,000
401(k)/457 assets managed	$86,000,000
International equity assets	$54,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	50
Minimum separate account	$10,000,000
No. of portfolio managers	8
Size of research staff	2

Provident Capital Management Inc. is an active equity, active fixed-income, balanced and active international global equity manager.

Its primary equity approach is team-and value-oriented using a bottom-up strategy focusing on low p/es. Its fixed-income approach uses a full range of securities with sector and credit analysis and interest-rate anticipation driving duration.

Paul R. Lesutis is chief investment officer. John C.E. Campbell is client contact.

Provident Investment Counsel

300 N. Lake Ave., Pasadena, Calif.
91101; (818) 449-8500

Total assets managed	$3,738,000,000
Total discretionary assets	$3,738,000,000
Discretionary tax-exempt	$3,323,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	190
Minimum separate account	$500,000
No. of portfolio managers	9
Size of research staff	4

Provident Investment Counsel is an active equity, active fixed-income and balanced manager.

Its equity approach combines companies of varying sizes. It systematically and in a disciplined manner buys companies that have superior financial characteristics and are experiencing an accelerating rate of earnings growth. Its primary fixed-income approach is based on interest rate trend recognition and the study of macroeconomic factors influencing that trend. Sector weightings for fixed-income holdings are based on computer-aided relative value analysis.

Robert M. Kommerstad is chief investment officer. Jeffrey J. Miller is client contact.

Provident Mutual Life Insurance Co.

1600 Market St., Philadelphia, Pa.
19103; (215) 636-5000

Total assets managed	$7,700,000,000
Total discretionary assets	$796,000,000
Discretionary tax-exempt assets	$796,000,000
Pooled accounts	$257,000,000
GICs	$314,000,000
Other	$225,000,000
401(k)/457 assets managed	$751,000,000
Tax-exempt clients	754
Types of accounts managed	CGU
Minimum separate account	$50,000
No. of portfolio managers	7
Size of research staff	10

Provident Mutual Life Insurance Co. is an active equity, active fixed-income, balanced and short-term manager.

It has two equity strategies. Its aggressive equity fund works to achieve a high level of long-term capital appreciation by investing in securities of a diverse group of smaller emerging-growth companies. The value equity fund's objective is to achieve above-average long-term growth of capital using a low p/e selection process.

Its fixed-income approach establishes interest rates at the beginning of the year given anticipated new money rates. Interest is credited/debited in following year as experience warrants.

Of the $905 million in institutional discretionary tax-exempt assets for which the insurer had custodial responsibility, $796 million was managed internally by the firm and $109 million was assigned to external investment firms.

Stanley R. Reber is chief investment officer. Andy Witman is client contact.

Provident National Assurance Co.

1 Fountain Square, Chattanooga,
Tenn. 37402; (615) 755-1901

Total assets managed	$6,674,000,000
Total discretionary assets	$6,674,000,000
Discretionary tax-exempt	$6,651,000,000
Pooled accounts	$101,000,000
GICs	$5,652,000,000
Annuities	$729,000,000
Other	$169,000,000
401(k)/457 assets managed	$4,441,000,000
Types of accounts managed	CG
No. of portfolio managers	2
Size of research staff	3

Provident National Assurance Co. is primarily a GIC and annuities manager.

Richard W. Busby is client contact.

Prudential Asia Fund Management

18 Chater Road, 32nd Floor, Central
Hong Kong; 844-1055

Total assets managed	$117,000,000
Total discretionary assets	$117,000,000
Discretionary tax-exempt	$0
No. of portfolio managers	2

Prudential Asia Fund Management, an active international equity manager, focuses on emerging growth stocks. Country weights are determined by macroeconomic factors; stock selection is based upon fundamental ratios, company management and market intelligence.

Michael Kwee is chief investment officer. Elizabeth Tran is client contact.

Prudential Assurance Co.

300-141 Adelaide St. W., Toronto,
Ontario M5H 3L9; (416) 362-4441

Total assets managed	$3,225,000,000
Total discretionary assets	$3,120,000,000
Discretionary tax-exempt	$420,000,000
For subsidiaries of U.S. firms	$20,000,000
Tax-exempt clients	100
U.S. subsidiaries	10
Types of accounts managed	CU
Minimum separate account	$4,300,000
No. of portfolio managers	8

Prudential Assurance Co. Ltd., a Canadian firm, is an active fixed-income, balanced and short-term manager.

Its equity approach is fundamentalist and active, using sector rotation, market timing and Graham & Dodd analysis. It concentrates on marketable Canadian stocks and weights industries against index-sub groups. Quantitative analysis is used to construct U.S. portfolios. Its fixed-income approach uses interest rate anticipation, concentrating on high-quality, marketable bonds. Portfolios are well diversified and actively traded.

R.W. Morrison is chief investment officer; K. Kukkonen is client contact.

Prudential-Bache Investment Management

9 W. 57th St., New York, N.Y. 10019;
(212) 415-5800

Total assets managed	$1,800,000,000
Total discretionary assets	$1,800,000,000
Discretionary tax-exempt	$1,000,000,000
Types of accounts managed	CEFGU
Minimum separate account	$500,000
No. of portfolio managers	9

Prudential-Bache Investment Management is an active equity, active fixed-income, balanced and short-term manager.

Its primary equity approach is value-oriented, focusing on low p/e stocks and using Graham & Dodd analysis. Its fixed-income approach uses interest rate anticipation.

Stuart Shikiar is chief investment officer. Jeffrey Lakind is client contact.

Prudential Diversified Investment Strategies

745 Broad St., Newark, N.J. 07102;
(201) 802-7373

Discretionary tax-exempt	$9,370,000,000
Assigned to external managers	$9,379,000,000

Prudential Diversified Investment Strategies is a manager of managers, offering passive equity, active and passive fixed-income, balanced, tactical asset allocation, real estate and short-term management through external advisers.

Its investment approach is based on the firm's value-oriented tactical asset allocation model's recommendation.

James H. Scott is chief investment officer; Mr. Scott and James B. McHugh are client contacts.

Prudential Fixed Income Advisors

2 Gateway Center, Newark, N.J.
07102; (201) 802-6790

Total assets managed	$10,720,000,000
Total discretionary assets	$10,720,000,000
Discretionary tax-exempt	$10,720,000,000
Fixed-income indexed assets	$1,292,000,000
Dedicated/immunized assets	$6,057,000,000
Types of accounts managed	CGU
No. of portfolio managers	10
Size of research staff	12

Prudential Fixed Income Advisors is a passive fixed-income, dedicated/immunized, nuclear decommissioning fund and target duration manager.

Its investment style is structured. Long-term strategies are developed with fixed duration targets; value is added value through credit and yield curve analysis, sector weighting and basic arbitrage.

Leonard M. Santoro is chief investment officer; Thomas M. Heneghan is client contact.

Prudential Investment Corp.

3 Gateway Center, Newark, N.J.
07102; (201) 802-8436

Total assets managed	$112,971,000,000
Total discretionary assets	$110,710,000,000
Discretionary tax-exempt	$45,351,000,000
Pooled accounts	$2,736,000,000
Separate accounts	$1,087,000,000
GICs	$21,152,000,000
Annuities	$10,418,000,000
Other	$9,958,000,000
401(k)/457 assets managed	$5,620,000,000
Equity real estate assets	$479,000,000
Mortgage assets	$11,456,000,000
International equity assets	$119,000,000
International fixed-income assets	$764,000,000
Equity indexed assets	$2,000,000
Tax-exempt clients	
Pooled	89
Separate	2
Types of accounts managed	CEFGU
Minimum separate account	$1,000,000

Prudential Investment Corp., through the Prudential Asset Management Group, offers active and passive equity, active and passive fixed-income, balanced, tactical asset allocation, real estate, active and passive international, short-term, and venture capital products.

Investment units whose assets are not reflected above and which are profiled separately are: Capital Supervisors Inc.; GIM Global Advisors; Hallmark Capital Management; INTECH; Jennison Associates; Matrix Capital Management; Mercator Asset Management; MIDCO Investors; PCM International; PRIFORM Investment Management; Prudential Asia Fund Management; Prudential Diversified Investment Strategies; Prudential Fixed Income Advisors; and Prudential Realty Group.

Garnett Keith is chief investment officer; Robert "Buck" Bowen is client contact.

Prudential Realty Group

3 Prudential Plaza, Newark, N.J.
07102; (201) 802-8462

Total assets managed	$47,800,000,000
Total discretionary assets	$47,800,000,000
Discretionary tax-exempt	$5,847,000,000
Equity real estate assets	$5,431,000,000
Mortgage assets	$506,000,000
Types of accounts managed	CGU
Tax-exempt clients	233
Minimum separate account	$100,000,000
No. of portfolio managers	5
Size of research staff	5

Prudential Realty Group is a full service real estate firm consisting of three operating units: The Prudential Property Co., The Prudential Mortgage Capital Co. and Prudential Real Estate Investors. Prudential Real Estate Investors provides investment management services, both debt and equity, for tax-exempt institutions. It uses a top-down, bottom-up approach to investing, using internal research capabilities to develop portfolio strategies that meet specific risk/return objectives.

Robert Riley is chief investment officer; Lester Lockwood is client contact.

PSM Investors

121 Judy Farm Road, Carlisle, Mass.
01741; (508) 369-0033

Total assets managed	$400,000,000
Discretionary tax-exempt	$350,000,000
Types of accounts managed	CE
Tax-exempt clients	125
Minimum separate account	$50,000
No. of portfolio managers	1

PSM Investors, an active equity manager, uses mutual funds, switching funds as market conditions warrant.

Stan Lipstadt is chief investment officer and client contact.

Public Storage Inc.

1015 Grandview Ave., Glendale, Calif.
91201; (818) 244-8080

Total assets managed	$3,148,000,000
Total discretionary assets	$2,800,000,000
Discretionary tax-exempt	$1,152,000,000
Equity real estate	$1,152,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	135
Minimum separate account	$15,000,000
No. of portfolio managers	9
Size of research staff	15

Public Storage Inc., a full-service real estate developer and asset manager, acquires commercial and high-grade industrial sites in major metropolitan areas for the development and management of self-storage facilities.

Hugh Horne is chief investment officer. Tom Mizo is client contact.

The Putnam Cos. Inc.

1 Post Office Square, Boston, Mass.
02109; (617) 292-1000

Total assets managed	$42,686,000,000
Total discretionary assets	$42,384,000,000
Discretionary tax-exempt	$7,157,000,000
401(k)/457 assets managed	$250,000,000
International equity assets	$128,000,000
International fixed-income assets	$142,000,000
Fixed-income indexed assets	$1,231,000,000
Dedicated/immunized assets	$944,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	85
Minimum separate account	$10,000,000
No. of portfolio managers	50
Size of research staff	51

The Putnam Cos. Inc. is an active domestic and international/global equity, active domestic and international/global fixed-income, balanced, and short-term manager.

Its equity approach seeks investment positions in four areas: quality growth, focusing on stocks with superior quality, growth and value characteristics; specialty equity, concentrating on medium- and small-cap companies with rapid earnings growth; OTC emerging growth, investing in small-cap companies with superior earnings growth expectations; and basic value, seeking undervalued companies with earnings and dividend growth rates equal to the market and above-market yield. Its fixed-income approach is disciplined and systematic, working to achieve predictable returns independent of interest rate moves and seeking opportunities to add value through yield curve changes.

Francis H.M. Kelly, Neil L. Thompson, Gary N. Coburn and Anthony W. Regan are chief investment officers; Orie L. Dudley Jr. is client contact.

Q

Qualified Counseling Inc.

46 Prince St., Rochester, N.Y. 14607;
(716) 461-9130

Total assets managed	$200,000,000
Discretionary tax-exempt	$163,000,000
Types of accounts managed	CEF
Tax-exempt clients	135
Minimum separate account	$300,000
No. of portfolio managers	4

Qualified Counseling Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach uses sector rotation and takes a conservative, top-down approach, selecting undervalued sectors and industries within which specific stocks are chosen. It also uses a top-down approach to develop the interest rate scenario and sector analysis for fixed-income decisions.

Jeffrey G. Anderson is chief investment officer; Lawrence T. McGowan is client contact.

Qualivest Capital Management Inc.

P.O. Box 2758, Portland, Ore. 97208;
(503) 275-6806

Total assets managed	$3,203,000,000
Total discretionary assets	$3,203,000,000
Discretionary tax-exempt	$982,000,000
401(k)/457 assets managed	$102,000,000
Types of accounts managed	CEFU
Tax-exempt clients	38
Minimum separate account	$2,000,000
No. of portfolio managers	7
Size of research staff	1

Qualivest Capital Management Inc. is an active equity, fixed-income, balanced, short-term and GIC/BIC manager.

Its value-oriented equity approach employs Graham & Dodd analysis along with structured diversification, including both large- and small-cap issues.

Its primary fixed-income approach is passive.

Gary K. Sweitzer is chief investment officer. Samuel Y. Schuster is client contact.

QuantiLogic Asset Management Co. Inc.

44 Montgomery St., Suite 854, San
Francisco, Calif. 94104; (415)
434-1130

Total assets managed	$775,000,000
Total discretionary assets	$775,000,000
Discretionary tax-exempt	$775,000,000
Types of accounts managed	CG
Tax-exempt clients	4
Minimum separate account	$50,000,000
No. of portfolio managers	2
Size of research staff	1

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William Wetzel
Vice President
213/444-2233

Richard A. Ross
Vice President
213/444-2473

Outside California (800)624-2090

QuantiLogic Asset Management Co. Inc. follows a quantitative tactical asset allocation investment approach.

It uses valuation and economic cycle analysis to measure expected risks and returns.

A. Darrell Braswell is chief investment officer; Jeffrey L. Winter is client contact.

Quest Advisory Corp.

1414 Avenue of the Americas, New York, N.Y. 10019; (212) 486-1445

Total assets managed	$1,447,000,000
Total discretionary assets	$891,000,000
Discretionary tax-exempt	$555,000,000
Types of accounts managed	CEF
Tax-exempt clients	18
No. of portfolio managers	2
Size of research staff	3

Quest Advisory Corp., an active equity manager, concentrates on securities of small and midsize companies using a strict fundamental approach. It focuses on understanding the private worth or value of a business.

Charles M. Royce is chief investment officer; Jack Fockler is client contact.

R

RAC Advisors Inc.

4000 Town Center, Suite 101, Southfield, Mich. 48075; (313) 358-2282

Total assets managed	$13,000,000
Total discretionary assets	$5,000,000
Discretionary tax-exempt	$5,000,000
Types of accounts managed	F
Tax-exempt clients	3
Minimum separate account	$100,000
No. of portfolio managers	1
Size of research staff	1

RAC Advisors Inc. is an active and passive equity, passive fixed-income and balanced manager.

Its primary equity approach uses growth stocks and a low-risk, high-potential valuation method with an emphasis on Graham & Dodd analysis.

Arthur Rodecker is chief investment officer and client contact.

Rainier Investment Management Inc.

1301 Fifth Ave., Suite 2500, Seattle, Wash. 98101; (206) 621-5666

Total assets managed	$1,151,000,000
Total discretionary assets	$1,151,000,000
Discretionary tax-exempt	$1,151,000,000
401(k)/457 assets managed	$85,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	133
Minimum separate account	$2,000,000
No. of portfolio managers	5

Rainier Investment Management Inc. is an active and passive equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach focuses on growth stocks with a value discipline. Positive earnings surprises, low relative p/e multiples, surplus cash flow generation and financial integrity are emphasized.

Its fixed-income approach uses interest rate anticipation and sector analysis. The firm works to maximize income while preserving capital and maintaining low volatility. Portfolios emphasize intermediate maturity and high credit quality.

Patricia L. Frost is chief investment officer; J. Glenn Haber is client contact.

Rampart Investment Management Co.

Exchange Place, 28th Floor, Boston, Mass. 02109; (617) 742-7400

Total assets managed	$625,000,000
Total discretionary assets	$625,000,000
Discretionary tax-exempt	$500,000,000
Types of accounts managed	C
Tax-exempt clients	5
Minimum separate account	$5,000,000
No. of portfolio managers	5

Rampart Investment Management Co. is an active and passive equity, passive fixed-income, low-risk equity, yield-enhancement equity and yield enhancement fixed-income manager.

Its equity approach targets the markets long-term rate of return with 50% to 60% less volatility. For fixed income, it uses a quantitative, disciplined overlay or "overwrite" strategy designed to generate incremental return and dampen volatility. Options and fixed-income futures are used.

The firm runs overlay strategies on all assets; it does not manage any of the underlying assets.

George M. DeVoe Jr. is chief investment officer; R. Ronald Guerrero is client contact.

Ramsay Investment Counsel

510 Holly Sugar Building, Colorado Springs, Colo. 80903; (719) 473-6925

Total assets managed	$43,000,000
Total discretionary assets	$41,000,000
Discretionary tax-exempt	$5,000,000
Types of accounts managed	CF
Tax-exempt clients	8
Minimum separate account	$100,000
No. of portfolio managers	2

Ramsay Investment Counsel Inc. is an active equity, passive fixed-income and balanced manager.

Its primary equity approach focuses on stocks with a five- to 10-year record of 10% or more growth of income and earnings.

Its primary fixed-income approach is buy-and-hold, to provide higher yield and low risk.

Robert H. Ramsay is chief investment officer and client contact.

RCB International Inc.

29 Federal St., Stamford, Conn. 06901; (203) 977-7000

Total tax-exempt	$1,152,000,000
Assigned to other firms	$1,152,000,000

RCB International Inc. is a manager of managers, offering active equity, active fixed-income, balanced, tactical asset allocation, real estate, active international equity and fixed-income, and short-term management through external advisers.

The firm selects a group of specialized investment advisers from a universe of more than 100 managers, with complementary styles and disciplines for each fund offered. By closely monitoring results and making changes, the funds achieve returns above a relevant benchmark at a reduced level of risk.

The firm offers a series of closed-end portfolios in which real estate is managed intensively to enhance value and to realize profit at the full potential of properties. In addition, a closed-end land development fund is offered.

William L. Green is chief investment officer; Robert J. Russell is client contact.

RCM Capital Management

4 Embarcadero Center, Suite 2900, San Francisco, Calif. 94111; (415) 954-5474

Total assets managed	$16,430,000,000
Total discretionary assets	$16,430,000,000
Discretionary tax-exempt	$14,465,000,000
International fixed-income assets	$117,000,000
Dedicated/immunized assets	$150,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	109
Minimum separate equity account	$15,000,000
Minimum separate bond account	$20,000,000
No. of portfolio managers	11
Size of research staff	23

RCM Capital Management is an active equity, active fixed-income, balanced, active international global fixed-income and short-term manager.

Its equity approach is to seek out industries and companies growing faster than the market and, through a series of valuation screens and other disciplines, purchase those securities whose growth in earnings and dividends will provide a total return in excess of the market.

Its primary fixed-income approach uses sector analysis and active duration management. Its objective is to achieve consistently superior relative and absolute rates of return in line with client objectives. The firm constantly monitors, balances and quantifies risk.

Claude N. Rosenberg Jr. is chief investment officer; Melody L. McDonald is client contact.

Reams Asset Management

P.O. Box 666, Columbus, Ind. 47202; (812) 372-6606

Total assets managed	$1,730,000,000
Total discretionary assets	$1,730,000,000
Discretionary tax-exempt	$1,717,000,000
International equity assets	$115,000,000
Types of accounts managed	CEF
Tax-exempt clients	8
Minimum separate account	$50,000,000
No. of portfolio managers	2
Size of research staff	5

Reams Asset Management Co. Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach emphasizes security selection; low p/e stocks are favored. Its fixed-income approach uses interest rate anticipation, seeking long-term total returns.

Fred W. Reams is chief investment officer; L.P. Berman is client contact.

W.H. Reaves & Co. Inc.

30 Montgomery St., Jersey City, N.J. 07302; (201) 332-4596

Total assets managed	$1,007,000,000
Total discretionary assets	$1,007,000,000
Discretionary tax-exempt	$1,007,000,000
401(k)/457 assets managed	$35,000,000
Types of accounts managed	CEF
Tax-exempt clients	31
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	8

W.H. Reaves & Co. Inc., an active equity manager, takes a conservative approach, committed exclusively to investments in electric utilities, natural gas, energy and telecommunication common stocks. It emphasizes capital preservation and low risk.

W.H. Reaves is chief investment officer; D.S. Robertson is client contact.

Red Oak Advisors

Park 80 West, Plaza 1, Saddle Brook, N.J. 07662; (201) 712-1990

Total assets managed	$20,000,000
Discretionary tax-exempt	$15,000,000
Types of accounts managed	C
Tax-exempt clients	8
Minimum separate account	$5,000,000
No. of portfolio managers	3

Red Oak Advisors is an active equity, active fixed-income and balanced manager.

Its primary equity approach uses defensive/value investment management, emphasizing above-average dividend yield, low p/e ratio and low ratio of price to tangible book value.

Its primary fixed-income approach is quantitative, using confirmed change in the interaction between interest rate momentum and "real" rate level.

Phyllis Weaver is client contact.

Reich & Tang L.P.

100 Park Ave., New York, N.Y. 10017; (212) 370-1110

Total assets managed	$1,633,000,000
Total discretionary assets	$1,633,000,000
Discretionary tax-exempt	$1,457,000,000
401(k)/457 assets managed	$20,000,000
Types of accounts managed	CEFU
Tax-exempt clients	40
Minimum separate account	$20,000,000
No. of portfolio managers	5

Reich & Tang L.P. is an active equity manager.

Its equity approach is based on value and growth. Through direct fundamental research, the firm seeks to identify superior business franchises that sell at a discount valuation and that have the potential for above-average growth with a minimum of financial and operating risk.

Its fixed-income approach uses interest rate anticipation to establish portfolio maturity; only Treasuries are used.

Robert F. Hoerle is chief investment officer; Charles Dunn is client contact.

Reimer and Koger Associates Inc.

8500 Shawnee Mission Parkway, Suite 105, Shawnee Mission, Kan. 66202; (913) 236-6700

Total assets managed	$902,000,000
Total discretionary assets	$902,000,000
Discretionary tax-exempt	$805,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	34
Minimum separate account	$1,000,000
No. of portfolio managers	10
Size of research staff	4

Reimer and Koger Associates Inc. is an active equity, active fixed-income, balanced and direct placement manager.

The largest division, core value balanced funds, uses a lower-risk, bottom-up value approach that focuses on quantifying undervalued earnings in a comparative proprietary universe. Buy/sell decisions are made by quantitatively screening 200 issues.

Its fixed-income approach is based on interest rate anticipation, using a duration-based discipline that seeks higher-than-market returns with market risk or less.

Kenneth H. Koger is chief investment officer; Thomas J. Bash is client contact.

Renaissance Investment Management Inc.

1700 Young St., Cincinnati, Ohio 45210; (513) 723-4500

Total assets managed	$1,666,000,000
Total discretionary assets	$1,514,000,000
Discretionary tax-exempt	$1,134,000,000
401(k)/457 assets managed	$19,000,000
Equity indexed assets	$30,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	223
Minimum separate account	$1,000,000
No. of portfolio managers	9
Size of research staff	2

Renaissance Investment Management Inc. offers quantitative investment for equity, balanced and fixed-income accounts.

Securities generally are limited to high-quality, liquid issues. Tactical asset allocation strategies are emphasized as a means of reducing risk while enhancing returns.

Frank W. Terrizzi, president, is chief investment officer and client contact.

Daniel H. Renberg & Associates Inc.

8383 Wilshire Blvd., Suite 926, Beverly Hills, Calif. 90211; (213) 852-0800

Total assets managed	$135,000,000
Total discretionary assets	$135,000,000
Discretionary tax-exempt	$76,000,000
Types of accounts managed	C
Tax-exempt clients	70
Minimum separate account	$500,000
No. of portfolio managers	3

Daniel H. Renberg & Associates, Inc. is an active equity and balanced manager.

Its equity approach emphasizes emerging and established growth companies and undervalued/special situation companies. Investments are selected using fundamental analysis.

Fixed-income investments are made for specific portfolio objectives.

Daniel H. Renberg is chief investment officer; Clay J. Stratton is client contact.

Resource Investors Management Co.

22 Waterville Road, Avon, Conn. 06001; (203) 678-8100

Total assets managed	$204,000,000
Total discretionary assets	$194,000,000
Discretionary tax-exempt	$90,000,000
Types of accounts managed	CEF
Tax-exempt clients	8
Minimum separate account	$[illegible]00,000
No. of portfolio managers	5
Size of research staff	5

Resource Investors Management Co. offers limited partnerships in energy investing. It specializes in evaluation of drilling prospects. It covers debt by current value of revenues from secured properties by a pre-determined ratio.

Paul E. McCollam is chief investment officer; John Parsons and Roy Hood are client contacts.

25 largest GIC providers

Firm	$ mils.*
Prudential Investment	21,152
Metropolitan Life	17,130
Aetna Life	13,206
Equitable Life	11,100
Travelers	9,225
John Hancock	8,385
New York Life	7,863
Principal Financial	6,993
Provident Nat'l	5,652
Massachusetts Mutual	4,173
Continental Assurance	3,662
Connecticut Mutual	2,821
State Mutual	2,686
Crown Life	2,656
Pacific Financial	2,610
Hartford Life	2,400
MONY	2,350
Northwestern Nat'l Life	2,094
Allstate Life	2,084
The New England	1,900
Mutual Benefit	1,847
Confederation Life	1,824
Great-West Life	1,685
Home Life	1,448
UNUM Life	1,428
Total	138,374

* discretionary, tax-exempt assets

Retirement System for Savings Institutions

41 E. 42nd St., New York, N.Y. 10017; (212) 503-0160

Total assets managed	$362,000,000
Total discretionary assets	$362,000,000
Discretionary tax-exempt	$362,000,000
401(k)/457 assets managed	$56,000,000
Mortgage assets	$700,000
International equity assets	$30,000,000
International cash assets	$1,000,000
Dedicated/immunized assets	$19,000,000
Types of accounts managed	C
Tax-exempt clients	90
No. of portfolio managers	7
Size of research staff	5

Retirement System for Savings Institutions is an active equity, active and passive fixed-income, active international equity and short-term manager.

Its equity approach uses emerging growth and low p/e stocks, sector rotation, tactical asset allocation and Graham & Dodd analysis. Different strategies are used for core, value, growth and international funds. Its fixed-income approach uses interest rate anticipation, concentrating on credit review. Its approach is diversified, offering active and dedicated funds.

James P. Coughlin is chief investment officer; Diane H. Dudzinski is client contact.

Rice, Hall, James & Associates

1200 3rd Ave., Suite 1600, San Diego, Calif. 92101; (619) 239-9005

Total assets managed	$730,000,000
Total discretionary assets	$730,000,000
Discretionary tax-exempt	$402,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	30
Minimum separate account	$600,000
No. of portfolio managers	7
Size of research staff	3

Rice, Hall, James & Associates is an active equity, active fixed-income and balanced manager.

Its equity approach attempts to identify unrecognized values with high-quality earnings and strong balance sheets. It emphasizes long-term fundamental value with good potential for earnings and dividend growth.

Its fixed-income approach is protective, using short- to intermediate-term Treasuries and high grade corporates.

Samuel R. Trozzo is chief investment officer; H. Michael Collins is client contact.

T.W. Richardson & Co.

6603 Bay St., Emeryville, Calif. 94608; (415) 652-0318

Total assets managed	$8,000,000
Discretionary tax-exempt	$0
Minimum separate account	$5,000,000
No. of portfolio managers	1

T.W. Richardson & Co., a real estate manager, does industrial and office land development and building management for its accounts and for controlled partnerships.

Thomas W. Richardson is chief investment officer and client contact.

Richmond Capital Management Inc.

10800 Midlothian Turnpike, Richmond, Va. 23235; (804) 379-8283

Total assets managed	$1,440,000,000
Total discretionary assets	$1,440,000,000
Discretionary tax-exempt	$952,000,000
Types of accounts managed	CEFG
Tax-exempt clients	44
Minimum separate account	$10,000,000
No. of portfolio managers	4

Richmond Capital Management Inc. is an active fixed-income and short-term manager.

It uses four elements of fundamental value analysis in its investment approach. Managers avoid market timing by remaining fully invested and relying on active trading of corporate securities.

Charles E. Keller is chief investment officer; L. David Hale is client contact.

Richter Asset Management

477 Madison Ave., New York, N.Y. 10022; (212) 753-3100

Total assets managed	$46,000,000
Total discretionary assets	$46,000,000
Discretionary tax-exempt	$38,000,000
International equity assets	$2,000,000
Types of accounts managed	CF
Tax-exempt clients	5
Minimum separate account	$500,000
No. of portfolio managers	1
Size of research staff	1

Richter Asset Management is an active equity and balanced manager.

Its equity approach integrates fundamental analysis and rigorous sell rules. It invests primarily in special situations — well-managed, well-capitalized companies with low p/es. Loss limitation is stressed through use of internally developed, systematic program.

Morton N. Richter is chief investment officer and client contact.

Riggs Investment Management Corp.

808 17th St., N.W., Washington, D.C. 20006; (202) 835-6700

Total assets managed	$1,600,000,000
Total discretionary assets	$1,600,000,000
Total discretionary tax-exempt	$1,468,000,000
401(k)/457 assets managed	$15,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	375
Minimum separate account	$2,000,000
No. of portfolio managers	7
Size of research staff	4

Riggs Investment Management Corp. is an active equity, active fixed-income, balanced and short-term manager.

Equity investment are value-oriented and characterized by low p/e ratios and above-average earnings growth rates. Fixed-income investments stress value through historical spread analysis. Maturity risk is constrained around portfolio objectives. Quantitative models are used extensively.

Robert A. von Pentz is chief investment officer and client contact.

Rittenhouse Financial Services

225 S. 18th St., Philadelphia, Pa. 19103; (215) 735-1225

Total assets managed	$649,000,000
Total discretionary assets	$637,000,000
Discretionary tax-exempt	$328,000,000
401(k)/457 assets managed	$6,000,000
Types of accounts	CEF
Tax-exempt clients	85
Minimum separate account	$500,000
No. of portfolio managers	9

Rittenhouse Financial Services is an active equity, active fixed-income and balanced manager.

Its equity approach tries to locate value in the high-equity, large-cap segment. Value is defined as low p/e and above-average yield. Average portfolio beta must be below the market.

In its fixed-income approach, it staggers maturities to a maximum of 10 years, using only high-quality corporate and government issues, and moves along the yield curve to minimize risk and maximize income.

James S. Morgan is chief investment officer; Bernard A. Francis Jr. is client contact.

RNC Capital Management

11601 Wilshire Blvd., Penthouse, Los Angeles, Calif. 90025; (213) 477-6543

Total assets managed	$950,000,000
Total discretionary assets	$950,000,000
Discretionary tax-exempt	$760,000,000
401(k)/457 assets managed	$120,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	799
Minimum separate account	$250,000
No. of portfolio managers	8
Size of research staff	21

RNC Capital Management Co. is an active equity, active fixed-income, balanced, tactical asset allocation and convertibles manager.

Its equity approach uses low p/e stocks, sector rotation and Graham & Dodd analysis. The firm generally buys stocks of larger companies with more than $10 billion in sales and dividends exceeding the S&P yield. All are listed on the NYSE or AMEX.

In fixed income, sector analysis is used. The firm quantitatively structures portfolios with bonds that are investment-grade and actively traded.

Thomas L. Roley is chief investment officer; Robert W. Nichols is client contact.

Roanoke Asset Management
10 E. 53rd St., New York, N.Y. 10022;
(212) 759-9097

Total assets managed	$640,000,000
Total discretionary assets	$640,000,000
Discretionary tax-exempt	$560,000,000
Types of accounts managed	CEFG
Tax-exempt clients	37
Minimum separate account	$3,000,000
No. of portfolio managers	4

Roanoke Asset Management is an active equity and balanced manager.

Its equity approach uses opportunistic growth and Graham & Dodd principles. The firm is a bottom-up stock selector focusing on companies and industries undergoing a positive fundamental change or improvement.

Edwin G. Vroom is chief investment officer; Martin W. Lynn is client contact.

Robshaw & Cheskin Associates Inc.
6245 Sheridan Drive, Suite 218,
Amherst, N.Y. 14221; (716)
633-6555

Total assets managed	$84,000,000
Total discretionary assets	$78,000,000
Discretionary tax-exempt	$47,000,000
Types of accounts managed	CEFU
Tax-exempt clients	40
Minimum separate account	$300,000
No. of portfolio managers	3
Size of research staff	2

Robshaw & Cheskin Associates Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach uses Graham & Dodd principles to screen growth and emerging stocks, making a fundamental search for superior long-term appreciation potential.

Its fixed-income approach is based on analysis of sectors, ratings and maturities, using the yield curve and anticipation shifts in the curve.

Stephen R. Robshaw and Alan E. Cheskin are chief investment officers. Mr. Cheskin is client contact.

Rock Capital Management
235 Montgomery St., Suite 605, San
Francisco, Calif. 94104; (415)
697-9054

Total assets managed	$39,000,000
Total discretionary assets	$39,000,000
Discretionary tax-exempt	$23,000,000
401(k)/457 assets managed	$2,000,000
Types of accounts managed	CFU
Tax-exempt clients	9
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	1

Rock Capital Management, an active equity manager, uses a hedged equity program to reduce greatly the risk of holding equities in a portfolio.

The options strategies are: buying puts as insurance; selling covered calls on portions of an equity; and selling fully collateralized puts to acquire stocks below market price.

Carl L. Rock is chief investment officer; Donald M. Bethe Jr. is client contact.

Rocky Mountain Investors
3200 Cherry Creek South Drive,
Denver, Colo. 80209; (303)
777-3200

Total assets managed	$140,000,000
Discretionary tax-exempt	$140,000,000
Equity real estate assets	$30,000,000
Mortgage assets	$85,000,000
Types of accounts managed	U
Tax-exempt clients	20
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	2

Rocky Mountain Investors, a real estate and short-term manager, provides short-term construction loans, participating mortgages and equity investments in union-built real estate projects.

J. Richard Allen is chief investment officer; Robert Lee and Jeff Crawford are client contacts.

Roll and Ross Asset Management Corp.
585 Skippack Pike, Suite 400, Blue
Bell, Pa. 19422; (215) 641-1448

Total assets managed	$625,000,000
Total discretionary assets	$600,000,000
Discretionary tax-exempt	$600,000,000
International equity assets	$25,000,000
Types of accounts managed	CEG
Tax-exempt clients	7
Minimum separate account	$15,000,000

Roll and Ross Asset Management Corp. is an active and passive equity and active international/global equity manager.

Its equity approach uses quantitative core enhancement. Its policy is to remain fully invested, with portfolio turn-over controlled to minimize transaction costs. The universe of securities used is based on client objectives.

Alan Yuhas is chief investment officer and client contact.

Edward C. Rorer & Co. Inc.
1 Liberty Place, Suite 5150,
Philadelphia, Pa. 19103; (215)
568-2126

Total assets managed	$45,000,000
Total discretionary assets	$43,000,000
Discretionary tax-exempt	$13,000,000
Types of accounts managed	CEF
Tax-exempt clients	9
Minimum separate account	$1,000,000
No. of portfolio managers	2

Edward C. Rorer & Co. Inc. is an active equity and balanced manager.

Its equity approach employs a proprietary model to evaluate prospects on a relative valuation basis. Relative p/e, relative price/book and relative yield are emphasized. Its fixed-income approach uses interest rate anticipation. Options are used.

Edward C. Rorer is chief investment officer; F. Stanton Moyer is client contact.

Rosen Associates
333 Jericho Turnpike, Jericho, N.Y.
11753; (516) 822-5350

Total assets managed	$510,000,000
Total discretionary assets	$510,000,000
Discretionary tax-exempt	$510,000,000
Equity real estate assets	$510,000,000
Types of accounts managed	C
Tax-exempt clients	4
No. of portfolio managers	4

Rosen Associates is a passive equity and real estate manager.

It uses tactical asset allocation and market timing in its equity approach.

In real estate, the firm seeks to maximize cash flows by rehabilitating older and troubled properties through remodeling, re-tenanting and/or re-leasing. The firm also acquires and builds neighborhood and community shopping centers.

Robert A. Rosen is chief investment officer.

Rosenberg Institutional Equity Management
4 Orinda Way, Suite 300E, Orinda,
Calif. 94563; (415) 254-6464

Total assets managed	$9,234,000,000
Total discretionary assets	$9,234,000,000
Discretionary tax-exempt	$5,561,000,000
International equity assets	$1,214,000,000
Types of accounts managed	CEFG
Tax-exempt clients	35
Minimum separate account	$75,000,000
Size of research staff	4

Rosenberg Institutional Equity Management is an active, quantitative domestic and international/global equity manager.

The firm uses proprietary in-house valuation models to analyze fundamental data on 3,700 stocks. It identifies moderately undervalued companies in every sector and constructs efficient portfolios of such stocks.

Barr Rosenberg is chief investment officer; Marlis S. Fritz is client contact.

The Rothschild Co.
32 South St., Baltimore, Md. 21202;
(301) 539-4660

Total assets managed	$951,000,000
Total discretionary assets	$941,000,000
Discretionary tax-exempt	$335,000,000
International equity assets	$20,000,000
International fixed-income assets	$20,000,000
Types of accounts managed	CEF
Tax-exempt clients	51
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	1

The Rothschild Co. is an active equity and balanced manager.

Its equity approach is value-oriented, with a bias toward growth, using Graham & Dodd principles. There is an emphasis on convertible securities.

Its fixed-income approach is based on use of convertibles and short-term cash equivalents.

Stanford Z. Rothschild Jr., F.J. Kreittle and J.M. Wikler are chief investment officers; Lee Raskin is client contact.

Rothschild Asset Management Inc.
1 Rockefeller Plaza, New York, N.Y.
10020; (212) 757-6000

Total assets managed	$0
Minimum separate account	$5,000,000
No. of portfolio managers	5

Rothschild Asset Management Inc. is an active equity, active fixed-income and balanced manager.

Its primary equity approach is quantitative and focuses on stocks that combine strong earnings growth and relative value. Its primary fixed-income approach uses interest rate anticipation.

George M. Pichvalsky is client contact.

N.M. Rothschild International Asset Management Ltd.
Five Arrows House, St. Swithin's Lane,
London EC4N 8NR, U.K.;
01-280-5000

Total assets managed	$1,903,000,000
Total discretionary assets	$1,903,000,000
Total discretionary tax-exempt	$473,000,000
International equity assets	$29,000,000
International fixed-income assets	$44,000,000
Types of accounts managed	CG
Tax-exempt clients	5
Minimum separate account	$10,000,000
No. of portfolio managers	10

N.M. Rothschild International Asset Management Ltd. is an active international equity and fixed-income, short-term and currency overlay manager.

Its equity approach seeks to add value in market, stock and currency selection. Concentrated and active asset allocation and market selection are stressed through fundamental economic analysis.

Its fixed-income approach is market rotation, using interest rate anticipation and currency and instrument management. Value is added through maturity, yield curve and market switches.

Of the assets above, the firm runs a currency overlay program on $2.401 billion in tax-exempt assets. The firm does not manage the underlying assets.

Nigel Wightman is chief investment officer; Suzanne Schecter is client contact.

Roulston & Co. Inc.
4000 Chester Ave., Cleveland, Ohio
44103; (216) 431-3000

Total assets managed	$700,000,000
Total discretionary assets	$500,000,000
Discretionary tax-exempt	$300,000,000
Types of accounts managed	CEFU
Minimum separate account	$100,000
No. of portfolio managers	7
Size of research staff	30

Roulston & Co. Inc. is an active and passive equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach uses fundamental research to purchase growth, emerging growth and low p/e stocks. Its fixed-income approach searches for market inefficiencies, never sacrificing quality or liquidity.

Jerry Dombick is chief investment officer; Thomas Roulston is client contact.

Roxbury Capital Management
1800 Avenue of the Stars, Los
Angeles, Calif. 90067; (213)
282-0820

Total assets managed	$224,000,000
Total discretionary assets	$224,000,000
Discretionary tax-exempt	$134,000,000
401(k)/457 assets managed	$1,000,000
Types of accounts managed	CEFG
Tax-exempt clients	50
Minimum separate account	$5,000,000
No. of portfolio managers	3

Roxbury Capital Management is an active equity and balanced manager.

Its equity approach is to focus on companies with strong business franchise, shareholder-oriented management and noncyclical growth prospects. Purchases usually display low p/e, high ROE, strong cash flow and sell below private market value.

Anthony H. Browne is chief investment officer; Fairfield Capital Associates, (203) 254-1215, is client contact.

RPI Institutional Services
275 Madison Ave., New York, N.Y.
10016; (212) 986-7510

Total assets managed	$92,000,000
Total discretionary assets	$7,000,000
Discretionary tax-exempt	$7,000,000
Types of accounts managed	CE
Tax-exempt clients	3
Minimum separate account	$5,000,000
No. of portfolio managers	4

RPI Institutional Services Inc. originates and manages direct oil and gas investments.

The firm seeks and negotiates investment opportunities directly with oil and gas operators, both for acquiring interests in oil and gas properties alongside the operator and for funding internal projects.

Robert C. Metzger is chief investment officer; Kenneth A. Menken is client contact.

The RREEF Funds
650 California St., Suite 1800, San
Francisco, Calif. 94108; (415)
781-3300

Total assets managed	$3,858,000,000
Total discretionary assets	$2,985,000,000
Discretionary tax-exempt	$2,985,000,000
Equity real estate assets	$2,985,000,000
Types of accounts managed	CGU
Tax-exempt clients	89
Minimum separate account	$100,000,000
No. of portfolio managers	4
Size of research staff	7

The RREEF Funds, a real estate manager, invests in high-quality equity real estate to provide its clients with diversification and superior returns. RREEF directly manages its properties to maximize value.

Donald A. King Jr. is chief investment officer and client contact.

Ruane, Cunniff & Co. Inc.
1370 Avenue of the Americas, New
York, N.Y. 10019; (212) 245-4500

Total assets managed	$2,274,000,000
Total discretionary assets	$2,274,000,000
Discretionary tax-exempt	$1,180,000,000
Types of accounts managed	CEF
Tax-exempt clients	100
No. of portfolio managers	3
Size of research staff	2

Ruane, Cunniff & Co. Inc., an active equity manager, emphasizes Graham & Dodd analysis.

The firm is not now accepting new accounts.

William J. Ruane is chief investment officer.

Frank Russell Trust Co.
909 "A" St., P.O. Box 1454, Tacoma,
Wash. 98401; (206) 572-2282

Total tax-exempt	$9,300,000,000
Assigned to other firms	$9,300,000,000

Frank Russell Trust Co. is a manager of managers, offering a series of 15 pooled funds. All assets are managed in commingled funds on its behalf by external investment advisers. Options and financial futures are used.

The core equity fund employs earnings-growth, market-oriented and price-driven styles. Two other equity funds concentrate on market timing and small-cap issues.

It has four international funds: a broadly diversified non-U.S. fund; a Pacific Basin fund; an emerging markets fund; and a South Africa-free fund.

There are three pooled fixed-income funds covering long-term intermediate and short-term strategies. The company also offers a GIC pooled fund, an open-end fund that guarantees principal and is market responsive.

The tactical asset allocation fund is a quantitatively based asset mix rebalancing strategy. The fund attempts to exploit the changing relative attractiveness among asset classes. The private partnerships fund invests in a number of different partnerships that use specialty investment approaches, such as hedging, informational short-selling and risk arbitrage.

The firm offers seven open-end and two closed-end real estate funds. The fund is diversified by property type, size, region, investment structuring, lease maturities and manager style.

Virginia Sirusas is client contact in New York, (212) 486-7744.

RXR Group
30 Buxton Farm Road, Stamford,
Conn. 06905; (203) 323-5015

Total assets managed	$257,000,000
Total discretionary assets	$257,000,000
Discretionary tax-exempt	$68,000,000
No. of portfolio managers	4
Size of research staff	5

RXR Group is an active fixed-income, balanced, short-term and managed futures manager.

RXR specializes in the design and implementation of quantitative futures, options and derivative product strategies. It uses these strategies to structure efficient investment portfolios consisting of equity, fixed-income, managed futures and cash management programs.

Jim Tomeo is client contact.

Ryan Labs Inc.
350 Albany St., PH2, New York, N.Y.
10280; (212) 945-2300

Total assets managed	$1,100,000,000
Total discretionary assets	$412,000,000
Discretionary tax-exempt	$412,000,000
Fixed-income indexed assets	$412,000,000
Types of accounts managed	CG
Tax-exempt clients	5
Minimum separate account	$10,000,000
No. of portfolio managers	2
Size of research staff	7

Ryan Labs Inc., an active and passive fixed-income manager, manages structured portfolios. Its approach is low risk/cost.

Ronald Ryan is chief investment officer and client contact.

S

Ronald Sadoff's Major Trends
250 W. Coventry Court, Milwaukee,
Wis. 53217; (414) 352-8460

Total assets managed	$65,000,000
Total discretionary assets	$65,000,000
Discretionary tax-exempt	$65,000,000
Types of accounts managed	CF
Tax-exempt clients	58
Minimum separate account	$100,000
No. of portfolio managers	1
Size of research staff	1

Ronald Sadoff's Major Trends is an active equity, passive fixed-income and balanced manager.

Its equity approach combines Graham & Dodd analysis with growth, emerging growth and low p/e stocks. Its low-risk/high-potential, top-down approach focuses on leading industries and companies emerging from long-term downtrends that possess value and growth potential.

Its top-down fixed-income approach uses interest rate anticipation and credit analysis.

Ronald Sadoff is chief investment office and client contact.

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: Government
U: Union

SAFECO Asset Management
SAFECO Plaza, T-14, Seattle, Wash.
98185; (206) 545-3496

Total assets managed	$1,690,000,000
Total discretionary assets	$1,690,000,000
Discretionary tax-exempt	$679,000,000
Types of accounts managed	CU
Tax-exempt clients	8
Minimum separate account	$5,000,000
No. of portfolio managers	5
Size of research staff	10

SAFECO Asset Management Co. is an active equity, active fixed-income and balanced manager.

In equities, the firm is a fundamental, research-oriented investor using traditional valuation techniques to establish a significant margin of safety relative to price.

Its fixed-income approach uses intermediate-term securities.

Eugene D. Holen is chief investment officer; M. Tucker Grills is client contact.

Salomon Brothers Asset Management Inc.
1 New York Plaza, New York, N.Y.
10004; (212) 747-9847

Total assets managed	$1,765,000,000
Total discretionary assets	$1,765,000,000
Discretionary tax-exempt	$5,000,000
Mortgage assets	$5,000,000
Types of accounts managed	F
Tax-exempt clients	1
Minimum separate account	$5,000,000
No. of portfolio managers	11
Size of research staff	2

Salomon Brothers Asset Management Inc. is a domestic and international/global active equity, domestic active fixed-income, short-term, mortgage security and high-yield manager.

Its equity approach is disciplined and value-oriented, incorporating quantitative and fundamental analysis of both equity and convertible securities.

Its fixed-income approach is quantitative and research-oriented, using prepayment modeling, option-adjusted spreads, sector swaps and supply/demand factors.

Michael F. Holland is chief investment officer; Peter B. Taggart is client contact.

Sanwa Bank California
612 S. Flower St., Los Angeles, Calif.
90017; (213) 613-2786

Total assets managed	$1,037,000,000
Total discretionary assets	$1,037,000,000
Discretionary tax-exempt	$250,000,000
Pooled accounts	$84,000,000
Separate accounts	$166,000,000
401(k)/457 assets managed	$25,000,000
Mortgage assets	$3,000,000
International equity assets	$3,000,000
Tax-exempt clients	
Commingled	65
Separate	120
Types of accounts managed	CFU
Minimum separate account	$500,000
No. of portfolio managers	7

Sanwa Bank California is an active domestic and international equity, active and passive fixed-income, real estate and short-term manager.

Its equity approach emphasizes companies with the most rapid and consistent earnings and dividend growth. Its fixed-income approach incorporates change in weighted average maturity, interest rate anticipation and sector shift.

John Thompson is chief investment officer; Kelsey L. Moline is client contact.

Fayez Sarofim & Co.
2 Houston Center, Suite 2907,
Houston, Texas 77010; (713)
654-4484

Total assets managed	$14,915,000,000
Total discretionary assets	$14,915,000,000
Discretionary tax-exempt	$13,105,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	320
No. of portfolio managers	16
Size of research staff	22

Fayez Sarofim & Co. is an active equity, active fixed-income, balanced and real estate manager.

Its equity approach focuses on growth in earnings and earning power. Fundamental economic and company analysis are the foundation of a top-down, flexible process. Current emphasis is on larger-cap companies with highly predictable earnings growth and market multiple. Its fixed-income approach is keyed to timely shifts in maturity as dictated by the interest rate outlook and is subject to specified minimum return objectives.

Fayez Sarofim is chief investment officer; James A. Reynolds is client contact.

Sasco Capital Inc.
10 Sasco Hill Road, Fairfield, Conn.
06430; (203) 254-6800

Total assets managed	$1,153,000,000

Total discretionary assets	$1,153,000,000
Discretionary tax-exempt	$1,153,000,000
Types of accounts managed	CF
Tax-exempt clients	17
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	1

Sasco Capital Inc., an active equity manager, follows a contrarian value discipline. It invests in financial underperformers with attractive business segments selling at a discount to asset value and future earning power.

Lee C. Garcia is client contact.

M.D. Sass Investors Services

1133 Avenue of the Americas, New
York, N.Y. 10704; (212) 730-2000

Total assets managed	[illegible]
Total discretionary assets	[illegible]
Discretionary tax-exempt	[illegible]
Types of accounts managed	CEFGU
Tax-exempt clients	100
Minimum separate account	$10,000,000
No. of portfolio managers	17

M.D. Sass Investors Services Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach combines tactical asset allocation with sector rotation, quantitative methods and a value orientation. Value is added by emphasizing secular trends and stocks selling below private business value, possessing an unrecognized attractive business undergoing fundamental business change and about to experience unexpected earnings growth. Options and futures are used actively to reduce risk; specialized risk arbitrage strategies are provided.

Its primary fixed-income approach uses sector analysis and features active use of options and futures to reduce risk. Five distinct portfolios of duration are available, with each one adding value through quality sector and specific maturity selection.

Martin D. Sass is chief investment officer. Thomas J. Mackell Jr. is client contact.

La Sauvegarde compagnie d'assurance sur la vie

1 Complexe Desjardins, Montreal,
Quebec H5B 1E2; (514) 285-7700

Total assets managed	$721,000,000
Total discretionary assets	$226,000,000
Discretionary tax-exempt	$226,000,000
For subsidiaries of U.S. firms	$16,000,000
Types of accounts managed	C
Minimum separate account	$2,500,000
No. of portfolio managers	5

La Sauvegarde companie d'assurance sur la vie, a Canadian firm, is an active equity, active fixed-income and balanced manager.

Its equity approach is value-oriented and uses sector rotation. Its fixed-income approach uses sector analysis and interest rate anticipation.

Diane Fleurent is chief investment officer and client contact.

SBC Portfolio Management International Inc.

1 World Trade Center, Suite 8935,
New York, N.Y. 10048; (212)
432-8900

Total assets managed	$703,000,000
Total discretionary assets	$703,000,000
Discretionary tax-exempt	$525,000,000
International equity assets	$509,000,000
Types of accounts managed	CG
Tax-exempt clients	30
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	2

SBC Portfolio Management International Inc. is an active international/global equity, fixed-income and balanced manager.

Its global, top-down equity approach emphasizes aggressive country allocations. It uses daily currency risk management and favors low p/e and value when market liquidity permits. Its fixed-income approach uses interest rate anticipation.

Peter J. Morant is chief investment officer; John W. Conlin and Rita J. Kleinman are client contacts.

Sceptre Investment Counsel

26 Wellington St. E., Toronto, Ontario
M5E 1W4; (416) 397-9898

Total assets managed	$7,030,000,000
Total discretionary assets	$7,030,000,000
Discretionary tax-exempt	$6,908,000,000
For subsidiaries of U.S. firms	$1,438,000,000
Mortgage assets	$133,000,000
Non-North American equities	$220,000,000
Tax-exempt clients	134
U.S. subsidiaries	36
Types of accounts managed	CEFGU
Minimum separate account	$47,000,000
No. of portfolio managers	12

Sceptre Investment Counsel Ltd., a Canadian firm, is a balanced manager.

Its primary equity approach is value-oriented. Graham & Dodd analysis is used with quantitative techniques and low p/e stocks. Its fixed-income approach is based on sector analysis.

J. Douglas Grant is chief investment officer; William J. Saunderson, is client contact.

Schaenen Wood & Associates Inc.

600 Madison Ave., New York, N.Y.
10022; (212) 319-3666

Total assets managed	$800,000,000
Total discretionary assets	$800,000,000
Discretionary tax-exempt	$480,000,000
401(k)/457 assets managed	$45,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	110
Minimum separate account	$1,000,000
No. of portfolio managers	6

Schaenen Wood & Associates Inc. is an active equity, active fixed-income, balanced and convertible securities manager.

Its equity approach is capital preservation, stressing value and sell disciplines. Selection is through proprietary computer screens. Convertible bonds are used extensively. Its primary fixed-income approach uses interest rate anticipation and sector analysis. Where appropriate, some convertible securities are used.

Gary W. Wood is chief investment officer and client contact.

Schroder Capital Management International

787 Seventh Ave., New York, N.Y.
10019; (212) 841-3830

Total assets managed	$3,869,000,000
Total discretionary assets	$3,869,000,000
Discretionary tax-exempt	$2,977,000,000
International equity assets	$2,789,000,000
International fixed-income assets	$10,000,000
International cash assets	$178,000,000
Types of accounts managed	CEFG
Tax-exempt clients	47
Minimum separate account	$20,000,000
No. of portfolio managers	7
Size of research staff	63

Schroder Capital Management International is an active manager of international/global equity and fixed-income.

Its equity approach begins with country allocation based on two-year economic projections. Within each country, the focus is on growth stocks. Fixed-income is used as a limited tactical alternative.

Richard R. Foulkes is chief investment officer. Sharon Haugh is client contact.

Schroder Real Estate Associates

437 Madison Ave., New York, N.Y.
10022; (212) 486-9800

Total assets managed	$1,100,000,000
Total discretionary assets	$300,000,000
Discretionary tax-exempt	$300,000,000
Equity real estate assets	$240,000,000
Mortgage assets	$60,000,000
Types of accounts managed	CG
Tax-exempt clients	18
Minimum separate account	$50,000,000
No. of portfolio managers	3

Schroder Real Estate Associates, a real estate manager, acquires underperforming or under-used properties that will respond to its direct, intense property and construction management. Properties are sold upon creation of optimal incremental value.

Norman L. Peck is chief investment officer; John Emmanuel is client contact.

Walter Scott International

626 Wilshire Blvd., Suite 410, Los
Angeles, Calif. 90017; (213)
623-2800

Total assets managed	$250,000,000
Total discretionary assets	$250,000,000
Discretionary tax-exempt	$250,000,000
International equity assets	$225,000,000
Types of accounts managed	CFG
Tax-exempt clients	7
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	1

Walter Scott International is an active international/global equity manager.

Its approach identifies the top quartile of world economic growth sectors and buys the best companies that are expected to continue growing internally at a rate in excess of 20%.

Walter G. Scott is chief investment officer; Richard A. Miller is client contact.

Scudder, Stevens & Clark

345 Park Ave., New York, N.Y. 10154;
(212) 326-6200

Total assets managed	$46,421,000,000
Discretionary tax-exempt	$10,718,000,000
401(k)/457 assets managed	$400,000,000
Foreign equity assets	$1,100,000,000
Foreign fixed-income assets	$200,000,000
Foreign cash assets	$10,000,000
Dedicated/immunized assets	$143,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	564
Minimum separate account	$1,000,000
No. of portfolio managers	97
Size of research staff	57

Scudder, Stevens & Clark is a domestic and international/global active equity and fixed-income, balanced, tactical asset allocation and short-term manager.

Its primary equity approach emphasizes buying companies that have demonstrated the ability to consistently earn above-average rates of return on invested capital when they are reasonably valued, and selling them when they become richly priced.

Its fixed-income approach emphasizes value both in terms of maturity and security selection.

Douglas M. Loudon and Lynn S. Birdsong are chief investment officers; Victoria J. Herget, David E. Honeyman Jr. and Emily L. Smith are client contacts.

Seaboard Investment Advisers

150 Boush St., Suite 800, Norfolk, Va.
23510; (804) 640-7300

Total assets managed	$205,000,000
Discretionary tax-exempt	$144,000,000
401(k)/457 assets managed	$16,000,000
International cash assets	$20,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	29
Minimum separate account	$1,000,000
No. of portfolio managers	3
Size of research staff	3

Seaboard Investment Advisers is an active equity, active fixed-income and balanced manager.

Its equity approach uses macroeconomic trend analysis to determine asset allocation and, combined with cyclical analysis, to identify appropriate sector exposures. Its fixed-income approach stresses absolute, positive return that is enhanced through sector exposure, yield curve analysis and duration management.

Eugene W. Hansen is chief investment officer; Stewart M. Powers Jr. is client contact.

Sears Investment Management Co.

55 W. Monroe St., Suite 3200,
Chicago, Ill. 60603; (312) 875-0450

Total assets managed	$6,013,000,000
Total discretionary assets	$6,013,000,000
Discretionary tax-exempt	$6,013,000,000
Equity real estate assets	$89,000,000
International equity assets	$322,000,000
Equity indexed assets	$1,947,000,000
Types of accounts managed	C
Tax-exempt clients	2

Sears Investment Management Co. is an active and passive domestic and international/global equity, active fixed-income, balanced, real estate, short-term and venture manager.

Its equity approach focuses on emerging growth and growth stocks using quantitative techniques. Its fixed-income approach uses interest rate anticipation.

David V. Dootson is chief investment officer.

Seattle Capital Management

P.O. Box 3586 (CSC 8), Seattle,
Wash. 98124; (206) 358-3264

Total assets managed	$2,628,000,000
Total discretionary assets	$1,093,000,000
Discretionary tax-exempt	$673,000,000
401(k)/457 assets managed	$244,000,000
Dedicated/immunized assets	$21,000,000
Types of accounts managed	CEFU
Tax-exempt clients	6
Minimum separate account	$10,000,000
No. of portfolio managers	3

Seattle Capital Management is an active and passive fixed-income and short-term manager.

Its fixed-income approach seeks to build a core portfolio of undervalued, high-quality securities around which sectors and duration targets are selected using a valuation orientation.

Ken Schultz is chief investment officer; Niki Helides is client contact.

Seattle-First National Bank

P.O. Box 3586, Seattle, Wash. 98124;
(206) 358-3297

Total assets managed	$3,517,000,000
Discretionary tax-exempt	$819,000,000
Pooled accounts	$286,000,000
Separate accounts	$533,000,000
Real estate assets managed	$3,000,000
Mortgage assets managed	$1,000,000
Tax-exempt clients	
Commingled	350
Separate	10
Types of accounts managed	CE
Minimum separate account	$1,000,000
No. of portfolio managers	6

Seattle-First National Bank is an active equity, active and passive fixed-income, balanced, real estate and short-term manager.

Its equity approach is value-oriented with sector bias. Its fixed-income approach uses sector analysis and interest rate anticipation.

Its real estate approach is to preserve capital, achieve long-term capital growth, maintain an inflation-adjusted income stream and high current income when compatible with objectives.

John Privat is chief investment officer; Steven Horman is client contact.

Securities Counsel Inc.

303 N. Rose St., Suite 500,
Kalamazoo, Mich. 49007; (616)
385-0200

Total assets managed	$3,126,000,000
Total discretionary assets	$2,884,000,000
Discretionary tax-exempt	$345,000,000
Types of accounts managed	CEFGU
Minimum separate account	$1,000,000

Securities Counsel Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach uses growth stocks. The firm's computer model is driven by earnings and price momentum, coupled with an economic overlay and fundamental analysis of companies.

Its fixed-income approach relies on interest rate anticipation. Accordingly, duration deviation strategies are implemented. Sector analysis and active trading of spread relationships between sectors are used.

Victor J. Malone is chief investment officer; Susan Carter-Manning is client contact.

Securities Counselors of Iowa Inc.

307 N. Michigan Ave., Chicago, Ill.,
60601; (312) 332-2135

Total assets managed	$456,000,000
Total discretionary assets	$447,000,000
Discretionary tax-exempt	$377,000,000
401(k)/457 assets managed	$50,000,000
Types of accounts managed	CEFU
Tax-exempt clients	186
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	5

Securities Counselors of Iowa Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach combines growth and low p/e stocks, sector rotation and quantitative methods, emphasizing balance-sheet quality.

Its primary fixed-income approach is based on interest rate anticipation and stresses active management of the primary portfolio characteristics: credit, quality; maturity; distribution; coupon; sector allocation; issue selection; and diversification.

John N. Knapp is chief investment officer; Myron R. Holman is client contact.

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: Government
U: Union

Security Capital Management Inc.

70 Seaview Ave., Stamford, Conn.
06902; (203) 964-9411

Total assets managed	$1,270,000,000
Discretionary tax-exempt	$1,270,000,000
International fixed-income assets	$25,000,000
Fixed-income indexed assets	$1,070,000,000
Dedicated/immunized assets	$10,000,000
Types of accounts managed	CFGU
Tax-exempt clients	20
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	2

Security Capital Management Inc. is a domestic

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Samuel Johnson
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and international/global active fixed-income, intermediate to long-term and futures and options manager.

Its fixed-income approach matches the duration of a client-designated benchmark and provides incremental return by exploiting the misvaluations in the fixed-income options and futures markets.

Jon B. Victor and Robert C. Brewer are chief investment officers; Eugene P. Ferguson is client contact.

Security Funding Corp.

P.O. Box 17583, Salt Lake City, Utah 84117; (801) 272-9261

Total assets managed	$21,000,000
Total discretionary assets	$21,000,000
Discretionary tax-exempt	$15,000,000
Types of accounts managed	C
Tax-exempt clients	70
Minimum separate account	$20,000
No. of portfolio managers	1
Size of research staff	2

Security Funding Corp., an active equity manager, uses a market timing model that seeks to preserve capital in down markets and provide reasonable profits in up markets.

Stock index futures are used.

Neil P. Christenson is chief investment officer.

Security Investors Corp.

1000 Louisiana, Suite 2100, Houston, Texas 77002; (713) 654-1102

Total assets managed	$20,000,000
Discretionary tax-exempt	$12,000,000
Types of accounts managed	C
Tax-exempt clients	8
Minimum separate account	$250,000
No. of portfolio managers	2

Security Investors Corp. is an active equity, active fixed-income, balanced and short-term manager.

Its value-oriented equity approach emphasizes stocks underowned by institutions. Detailed cash flow analysis is used to identify stocks with fast paybacks.

Its fixed-income approach uses yield curve analysis to determine the maturity mix and sector analysis to identify attractive yield spread differentials. High-quality issues are used.

James M. Parker is chief investment officer and client contact.

Security Pacific Bank Oregon

1001 S.W. Fifth Ave., P.O. Box 2808, Portland, Ore. 97208; (503) 796-3603

Total assets managed	$162,000,000
Total discretionary assets	$162,000,000
Discretionary tax-exempt	$59,000,000
Pooled accounts	$9,000,000
Separate accounts	$50,000,000
401(k)/457 assets managed	$6,000,000
Tax-exempt clients:	
Commingled	29
Separate	30
Types of accounts managed	CEF
Minimum separate account	$500,000
No. of portfolio managers	3

Security Pacific Bank Oregon is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach stresses undervalued equities with low p/es. Its fixed-income approach emphasizes consistency of return and principal stability.

Robert T. Platt III is chief investment officer; Dennis Munsey is client contact.

Security Pacific Funds Management

300 S. Grand Ave., Suite 2200, Los Angeles, Calif. 90071; (213) 229-1619

See entry for SECURITY PACIFIC INVESTMENT GROUP.

Security Pacific Investment Group

300 S. Grand Ave., Suite 2200, Los Angeles, Calif. 90071; (213) 229-1184

Total assets managed	$25,735,000,000
Total discretionary assets	$18,735,000,000
Discretionary tax-exempt	$5,739,000,000
401(k)/457 assets managed	$732,000,000
Equity real estate assets	$700,000,000
Mortgage assets	$664,000,000
International equity assets	$37,000,000
International cash assets	$100,000,000
Fixed-income indexed assets	$290,000,000
Types of accounts managed	CEFGU
No. of portfolio managers	59
Size of research staff	54

Security Pacific Investment Group, through its subsidiaries, is an equity, fixed-income, balanced, real estate, international and money market manager.

Edward G. Hartmann is chief investment officer; Norman J. Wohlken is client contact.

The assets of the following subsidiaries are included within the data of the parent company above.

- ACA Capital Management Inc. manages $44 million in tax-exempt assets in yield-oriented value equity accounts. Paul A. Woods is the chief investment officer; Mr. Wohlken is the client contact.

- Broadgate Asset Management Ltd. manages $27 million in total assets in active equity, active fixed-income, balanced and active international equity and fixed-income accounts.

The firm's conservative top-down equity approach uses geographic rotation within a disciplined allocation model of given parameters. Growth stocks are emphasized.

For fixed-income, the firm uses international macroeconomic analysis and interest rate anticipation over the longer term. Strict currency parameters are employed, and investments are confined to AAA or government-guaranteed vehicles.

John D. Webb is the chief investment officer; Robert Hook and Mr. Wohlken are client contacts.

- Financial Management and Trust Services manages active equity, active and passive fixed-income, balanced, tactical asset allocation short-term and real estate accounts, totaling $1 billion in tax-exempt assets.

Growth, emerging growth and blue chip growth stocks are used in equity management. The fixed-income approach uses duration and index management.

Its real estate strategy focuses on investment-grade properties, emphasizing income stability. Concentration is on multifamily and commercial properties in the West.

Berthal A. Downey III is the chief investment officer. James B. Clark is the client contact.

- InterCash Advisors Inc. manages active international fixed-income and short-term tax-exempt assets of $402 million. The firm uses a quantitative approach in the areas of credit, maturity, structure, yield curve and sector analysis to enhance returns. Fixed-income futures are used.

Stephen A. Walsh is the chief investment officer; Mr. Wohlken is the client contact.

- Pacific Century Advisers Inc. manages $323 million in tax-exempt assets. The firm is an active equity and convertibles manager.

Its equity approach focuses on growth and emerging growth stocks, with high earnings and price momentum. The fixed-income approach uses convertible securities in a top-down selection process driven by earnings, existing debt and cash flow.

Mr. Wohlken is the client contact.

- Security Pacific Funds Management manages $4.904 billion in total assets in mutual fund accounts. The firm manages some tax-exempt institutional assets, but a breakdown was not available.

Greg Sanford is the chief investment officer; Debra McGinty-Poteet is the client contact.

- Sumisei SecPac Investment Advisors Inc. manages $108 million in tax-exempt assets, all in active domestic equities. The firm has a yield/value orientation.

Paul Woods is the chief investment officer; Hiroshi Ono and Mr. Wohlken are client contacts.

- Security Pacific Investment Managers Inc. is an active equity, active fixed-income, balanced, real estate, short-term and high-yield bond manager. It manages $3.825 billion in tax-exempt assets.

The top-down equity approach identifies the position of the economy in the business cycle to select appropriate growth vehicles.

Its fixed-income strategy uses interest rate anticipation and sector rotation to enhance value relative to a benchmark by picking undervalued sectors and issues.

For real estate, it uses an actively managed, open-end commingled fund, employing high-quality, debt-related instruments.

J. Michael Gaffney is chief investment officer; Mr. Wohlken is client contact.

- Sumitrust Security Pacific Investment Managers Inc. is a Japanese equity manager with $37 million in tax-exempt assets. The firm is a quasi-active manager, using the BARRA Japanese model. Stocks are selected through proprietary screens.

Yukihiro Asano is chief investment officer; Ted Sugama and Mr. Wohlken are clients contacts.

Security Pacific Investment Managers Inc.

300 S. Grand Ave., Suite 2200, Los Angeles, Calif. 90071; (213) 229-1184

See entry for SECURITY PACIFIC INVESTMENT GROUP.

J & W Seligman & Co. Inc.

130 Liberty St., New York, N.Y. 10006; (212) 488-0209

Total assets managed	$8,060,000,000
Total discretionary assets	$8,060,000,000
Discretionary tax-exempt	$2,341,000,000
401(k)/457 assets managed	$35,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	114
Minimum separate account	$5,000,000
No. of portfolio managers	20
Size of research staff	10

J & W Seligman & Co. Inc. is an active equity, active fixed-income and balanced manager.

Its primary equity approach focuses on growth and emerging growth stocks.

Its fixed-income approach follows an intermediate benchmark strategy that is based on management of key financial trade-offs (among issues and sectors) within a disciplined risk management framework. Maturity structure within benchmark parameters is based on long-term secular trends and client objectives. An equity-oriented high-yield bond approach is offered.

Ronald T. Schroeder is chief investment officer; Michael J. Del Priore is client contact.

Sentinel Real Estate

1290 Avenue of the Americas, New York, N.Y. 10104; (212) 408-2900

Total assets managed	$2,000,000,000
Total discretionary assets	$1,800,000,000
Total discretionary tax-exempt	$1,618,000,000
Equity real estate assets	$1,618,000,000
Types of accounts managed	CGU
Tax-exempt clients	132
Minimum separate account	$20,000,000
No. of portfolio managers	5

Sentinel Real Estate Corp., a real estate manager, purchases newly constructed or existing, proven income-producing properties, primarily multifamily garden apartments, with average cash yields of 8%. Intensive on-site property management is performed. Properties are generally sold in three to five years.

John Streicker is chief investment officer; Nick Verano is client contact.

Shearson Asset Management

31 W. 52nd St., New York, N.Y. 10019; (212) 767-2300

Total assets managed	$5,673,000,000
Total discretionary assets	$5,673,000,000
Discretionary tax-exempt	$2,558,000,000
401(k)/457 assets managed	$29,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	194
Minimum separate account	$500,000
No. of portfolio managers	17

Shearson Asset Management is an active equity, active fixed-income and balanced manager.

Its equity approach uses fundamental analysis to assess earnings momentum, unrecognized value and the quality of management. Stocks should benefit from competitive advantage and dominant industry and economic trends. It focuses on well-capitalized companies with good relative value and price.

Its fixed-income approach is to invest in high-quality securities in issues or sectors undervalued on a relative basis.

Harry D. Cohen is chief investment officer; Thomas Vandeventor is client contact.

Shearson Equity Management

31 W. 52nd St., New York, N.Y. 10019; (212) 767-2556

Total assets managed	$793,000,000
Total discretionary assets	$793,000,000
Discretionary tax-exempt	$300,000,000
401(k)/457 assets managed	$20,000,000
Types of accounts managed	CU
Tax-exempt clients	1,500
Minimum separate account	$50,000
No. of portfolio managers	1
Size of research staff	3

Shearson Equity Management is an active equity and balanced manager.

Its equity approach is to invest in high-quality growth stocks. Its primary fixed-income approach for balanced accounts is passive.

Barry Berlin is chief investment officer; Jack Hochstrasser is client contact.

Shearson Management Co.

521 Fifth Ave., Suite 1401, New York, N.Y. 10175; (212) 759-8932

Total assets managed	$229,000,000
Total discretionary assets	$220,000,000
Discretionary tax-exempt	$72,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	75
Minimum separate account	$200,000
No. of portfolio managers	2

Shearson Management Co. is an active equity, active fixed-income and balanced manager.

Its primary equity approach is to look for "niche" growth companies with proven track records. Accounts usually are diversified in 10 positions.

Leslie M. Pollack is chief investment officer; Andrew S. Hall Jr. is client contact.

Sheffield Investment Management Inc.

900 Circle 75 Parkway, Suite 750, Atlanta, Ga. 30338; (404) 953-1597

Total assets managed	$24,000,000
Total discretionary assets	$24,000,000
Discretionary tax-exempt	$18,000,000
Types of accounts managed	C
Tax-exempt clients	26
Minimum separate account	$500,000
No. of portfolio managers	1
Size of research staff	1

Sheffield Investment Management Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach focuses on low p/e stocks, using screens to locate stocks selling at or below book value and having earnings growth potential of 20% annually. Options are used.

Bonds are used to enhance cash flow and reduce volatility. Maturities are held three to 10 years; those with a BBB rating or better typically are held to maturity.

Roger Sheffield is chief investment officer and client contact.

Shields Asset Management

709 Westchester Ave., White Plains, N.Y. 10604; (914) 684-6900

Total assets managed	$4,417,000,000
Total discretionary assets	$4,417,000,000
Discretionary tax-exempt	$4,417,000,000
Types of accounts managed	CFGU
Tax-exempt clients	115
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	7

Shields Asset Management Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach attempts to identify and overweight sectors and industry groups most likely to benefit from anticipated political, fundamental and economic trends. Portfolios are diversified among well-capitalized, industry-leading companies. Emphasis is on consistent, competitive lower volatility returns.

In fixed-income, maturity/duration judgments within an intermediate term average life are based on anticipating interest rate trends. Sector shifts are made when appropriate; only high-quality investment-grade issues are considered.

Kenneth Safian is chief investment officer; John R. Larkin is client contact.

25 largest international/global managers

Firm	$ mils.*
State Street Bank	7,708
Capital Guardian	5,008
Wells Fargo	4,771
Brinson Partners	3,783
Baring Int'l	3,586
Rowe Price-Fleming	3,063
Schroder Capital	2,977
J.P. Morgan	2,915
Morgan Grenfell	2,882
Templeton Int'l	2,747
Grantham, Mayo	2,437
G.E. Investment	2,176
Nomura Capital	2,084
Warburg Investment	1,863
WorldInvest	1,812
Oechsle Int'l	1,788
Capital Research & Mgmt.	1,717
Chase Investors	1,616
Morgan Stanley Asset	1,615
Boston Int'l Advisors	1,499
Batterymarch Financial	1,455
PCM Int'l	1,367
Scudder, Stevens & Clark	1,310
Bankers Trust	1,271
Rosenberg Institutional	1,214
Total	**64,664**

*Discretionary, tax-exempt assets

Shinnecock Partners

477 Madison Ave., Suite 200, New York, N.Y. 10022; (212) 935-1133

Total tax-exempt	$5,000,000
Assigned to other firms	$5,000,000

Shinnecock Partners, a manager of managers, offers active domestic and international equity and fixed-income and balanced management through external managers.

Its equity and fixed-income approaches seek diversification using several strategies within portfolios.

George F. Amrhein Jr. is chief investment officer and client contact.

Siebel Capital Management

80 E. Sir Francis Drake Blvd., Larkspur, Calif. 94939; (415) 461-3850

Total assets managed	$2,125,000,000
Total discretionary assets	$2,125,000,000
Discretionary tax-exempt	$1,309,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	101
No. of portfolio managers	8
Size of research staff	1

Siebel Capital Management Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach is value-oriented, using low p/e growth stocks and sector rotation with market timing/tactical asset allocation.

Its fixed-income approach is duration management, using moderate market timing to follow the market.

Ronald S. Sloan is chief investment officer; Lawrence A. Mitchell is client contact.

Signet Asset Management

P.O. Box 26311, Richmond, Va. 26311; (804) 771-7658

Total assets managed	$706,000,000
Total discretionary assets	$706,000,000
Discretionary tax-exempt	$528,000,000
Types of accounts managed	CEFU
Tax-exempt clients	40
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	2

Signet Asset Management is an active equity, active fixed-income and balanced manager.

Its equity approach is value-oriented and risk averse, blending top-down economic analysis/sector weightings with a bottom-up approach to s selection.

Its fixed-income approach uses interest rate a ipation, sector analysis and alternative securi The firm emphasizes income and controlling terest rate/credit risk.

W. Guy Williams Jr. is chief investment office Gregory Weirich is client contact.

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: Government
U: Union

Simpson Capital Management Co.

1205 PSFS Building, Philadelphia, F 19107; (215) 629-0162

Total assets managed	$70,000
Total discretionary assets	$50,000
Discretionary tax-exempt	$15,000
Types of accounts managed	
Tax-exempt clients	
Minimum separate account	$1,000
No. of portfolio managers	

Simpson Capital Management Co. is an a equity, active and passive fixed-income, balar and tactical asset allocation manager.

Its equity approach is contrarian, using Graha Dodd analysis and low p/e screens to ider growth and emerging growth stocks. Sector r tion and market timing are used.

Its fixed-income approach predominantly u Treasuries, controlling maturity managem through interest rate anticipation.

Allen J. Simpson is chief investment officer client contact.

Sirach Capital Managemen

3323 One Union Square, Seattle, Wash. 98101; (206) 624-3800

Total assets managed	$1,038,000,
Total discretionary assets	$1,038,000,
Discretionary tax-exempt	$854,000,
401(k)/457 assets managed	$45,000,
Types of accounts managed	CEF
Tax-exempt clients	
Minimum separate account	$10,000,
No. of portfolio managers	
Size of research staff	

Sirach Capital Management Inc. is an active uity, active fixed-income and balanced manager

The firm emphasizes growth at a reasona value, seeking companies with strong positive e ings acceleration.

Its fixed-income approach uses interest rate a ipation. Bonds are selected for absolute returns relative values. Portfolio duration is limited to plu minus two years around a major index.

George B. Kauffman is chief investment offi Thomas J. Gillespie is client contact.

Sit Investment Associates

90 S. Seventh St., 4600 Norwest Center, Minneapolis, Minn. 55402-4130; (612) 332-3223

Total assets managed	$2,929,000,
Total discretionary assets	$2,929,000,
Discretionary tax-exempt	$2,526,000,
International equity assets	$261,000,
Types of accounts managed	CE
Tax-exempt clients	
Minimum separate account	$15,000,
No. of portfolio managers	
Size of research staff	

Sit Investment Associates Inc. is an active eq active fixed-income, balanced, active internatio global equity and short-term manager.

Its equity approach is rotational, used in comb tion with 10% to 15% positions in smaller and dium-size growth companies. Separate emerg growth style products are available. Its fixed-inco approach is interest rate anticipation rotated short- and long-duration, stable return produ Fixed-income futures are used.

Eugene C. Sit is chief investment officer; Pete Mitchelson is client contact.

Skye Investments Inc.

P.O. Box 12305, 625 Highway 50, Suite 7, Zephyr Cove, Nev. 89448 (702) 588-5022

Total assets managed	$643,000,
Total discretionary assets	$643,000,
Discretionary tax-exempt	$628,000,
Types of accounts managed	
Minimum separate account	$5,000,
No. of portfolio managers	
Size of research staff	

Skye Investments Inc. is an active and pas equity and passive fixed-income manager that s cializes in enhancing portfolio income via cove call writing for fixed-income and equity portfolios

The firm also uses options for controlling a va of risks, including protection against stock ma declines, adverse interest rate moves, oil p declines and foreign exchange risk. This cove call writing program identifies options that offer cess rates of return using proprietary models, w include volatility estimation, option pricing, tran tion cost and risk/return allocation.

Paul L. McEntire is chief investment officer; Thomas is client contact.

SLH Asset Management

31 W. 52nd St., New York, N.Y. 10019; (212) 767-2540

Total assets managed	$39,219,000
Total discretionary assets	$39,219,000
Discretionary tax-exempt	$1,107,000
Types of accounts managed	CE
Tax-exempt clients	
No. of portfolio managers	

SLH Asset Management offers active equity tive fixed-income and balanced management through its two subsidiaries, profiled below. SLH Asset Management primarily incorporates the equity mutual funds of the former Hutton Asset Management Group.

Thomas B. Stiles II is chief investment officer and client contact.

- SLH Capital Management manages $1.035 billion in active equity, active fixed-income and balanced accounts for 213 U.S. institutional, tax-exempt discretionary clients.

Its equity approach seeks to identify companies characterized by an attractive combination of profitability, growth and financial strength priced at below-market p/e ratios.

For balanced accounts, the fixed-income approach focuses on yield curve inflation and the relative attractiveness of government vs. corporate issues. Maturities are kept below 10 years.

Frank Caruso is chief investment officer. Jeffrey Applegate is client contact.

- SLH Government Securities Management manages $72 million in tax-exempt assets in active fixed-income accounts for 60 clients.

The firm monitors and analyzes key economic data to identify longer term interest rate trends. Portfolios are positioned accordingly, using U.S. government and selected agency issues. Average maturity is kept within 5 years.

Ellen S. Friedenberg is chief investment officer and client contact.

SLH Capital Management
31 W. 52nd St., New York, N.Y.
10019; (800) 848-7470

See entry for SLH ASSET MANAGEMENT

SLH Government Securities Management
31 W. 52nd St., New York, N.Y.
10019; (212) 767-3705

See entry for SLH ASSET MANAGEMENT

Smith Affiliated Capital
880 Third Ave., New York, N.Y. 10021;
(212) 534-5837

Total assets managed	$676,000,000
Discretionary tax-exempt	$594,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	40
Minimum separate account	$2,500,000
No. of portfolio managers	4
Size of research staff	6

Smith Affiliated Capital Corp. is an active and passive fixed-income, balanced and active international/global fixed-income manager.

Its balanced approach begins with a heavy fixed-income bias (70%) and uses stocks as a hedge.

Its active duration fixed-income approach starts with a secular view and moderates the cyclical interest rate risk with a yield curve discipline. The firm avoids credit risk and will accept maturity risk if it is rewarded with current return. Value is added through maturity and sector selection.

Robert G. Smith Sr. is chief investment officer; Robert G. Smith Jr. and Maria Smith are client contacts.

Smith Barney Capital Management
1345 Avenue of the Americas, New
York, N.Y. 10105; (212) 698-6131

Total assets managed	$3,800,000,000
Total discretionary assets	$3,800,000,000
Discretionary tax-exempt	$2,053,000,000
International fixed-income assets	$215,000,000
Fixed-income indexed assets	$768,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	62
Minimum separate account	$5,000,000
No. of portfolio managers	10
Size of research staff	59

Smith Barney Capital Management is an active equity, active and passive fixed-income, balanced and active international fixed-income manager.

Its equity approach is characterized by high-yield, moderate growth and low volatility, with an emphasis on high quality, higher yielding stocks and convertibles.

Its fixed-income approach is index enhanced, primarily aimed at exploiting the inefficiencies in the market across all sectors. Proprietary valuation models and historical data are used to determine appropriate levels of risk.

Bruce D. Sargent is chief investment officer; Jill B. Jordon is client contact.

Cabanne Smith Associates
101 Bryn Mawr Ave., Suite 362, Bryn
Mawr, Pa. 19010; (215) 525-8350

Total assets managed	$88,000,000
Total discretionary assets	$88,000,000
Discretionary tax-exempt	$73,000,000
Types of accounts managed	CEF
Tax-exempt clients	4
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	1

Cabanne Smith Associates Inc., an active and passive equity manager, invests in growth equities where the two-year EPS growth rate is at least 1.25 times the current market multiple, allowing the firm to construct portfolios for both conservative and aggressive investors.

Cabanne C. Smith is chief investment officer and client contact.

Donald Smith & Co. Inc.
15 Essex Road, Paramus, N.J. 07652;
(201) 368-9210

Total assets managed	$1,026,000,000
Total discretionary assets	$1,026,000,000
Discretionary tax-exempt	$1,026,000,000
401(k)/457 assets managed	$38,000,000
Types of accounts managed	CEG
Minimum separate account	$50,000,000
No. of portfolio managers	2
Size of research staff	1

Donald Smith & Co. Inc., an active equity manager, focuses fundamental research on stocks with low p/e and low price/book value ratios.

Donald G. Smith is chief investment officer and client contact.

Smoot, Miller, Cheney & Co.
10 W. First South, Crandall Building,
Suite 312, Salt Lake City, Utah
84101; (801) 328-4835

Total assets managed	$1,134,000,000
Discretionary tax-exempt	$1,109,000,000
401(k)/457 assets managed	$1,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	52
Minimum separate account	$1,000,000
No. of portfolio managers	4
Size of research staff	2

Smoot, Miller, Cheney & Co. is an active equity, active fixed-income and balanced manager.

The firm takes active positions in market sectors deemed to offer the greatest potential returns. The value-oriented investment style emphasizes companies with strong financial characteristics and superior market penetration. The research process is dynamic, focusing on relative value and earnings momentum. Fundamental and technical analysis are blended to optimize the timing of purchases and sales.

The fixed-income approach is based on interest rate anticipation and emphasizes intermediate-term maturities with a rating of A or higher.

Robert Cheney is chief investment officer; Robert Pitts is client contact.

Snyder Capital Management
400 Montgomery St., Suite 700, San
Francisco, Calif. 94104; (415)
392-3900

Total assets managed	$115,000,000
Total discretionary assets	$115,000,000
Discretionary tax-exempt	$70,000,000
International equity assets	$5,000,000
Types of accounts managed	CEF
Tax-exempt clients	15
Minimum separate account	$2,000,000
No. of portfolio managers	1
Size of research staff	3

Snyder Capital Management is an active domestic and international/global equity, passive fixed-income and balanced manager.

Its equity selection follows a disciplined, value-related approach. Emphasis is on capital preservation and superior upside performance.

Alan B. Snyder is chief investment officer; Mr. Snyder and Walter Niemasik Jr. are client contacts.

Society Bank, Michigan
100 S. Main St., P.O. Box 8612, Ann
Arbor, Mich. 48107-8612; (313)
994-5555

Total assets managed	$812,000,000
Total discretionary assets	$623,000,000
Discretionary tax-exempt	$153,000,000
Pooled accounts	$73,000,000
Separate accounts	$80,000,000
401(k)/457 assets managed	$1,000,000
Real estate equity assets	$1,000,000
International equity assets	$4,000,000
Tax-exempt clients:	
Commingled	340
Separate	192
Types of accounts managed	CEFU
Minimum separate account	$250,000
No. of portfolio managers	3
Size of research staff	1

Society Bank, Michigan, formerly Trustcorp Bank, Ann Arbor, is an active equity, active fixed-income, balanced, real estate, active international equity and short-term manager.

Its primary equity approach is price/valuation driven. The universe is fundamentally screened for companies with a unique product/service/market position that allows sustainable earnings growth over three to five years.

In fixed-income, it selects high-quality bonds with maturities based on economic outlook and projected interest rate changes. The primary emphasis is high current return, with principal preservation. Yield spreads dictate the type of bond.

Its real estate approach is to select equity-oriented vehicles that will provide consistent total return and inflation protection, with reduced volatility. Emphasis is on diversification by location, property type and management style.

Edward H. Sichler III is chief investment officer; Richard Meyerson is client contact.

Sound Shore Management
P.O. Box 1810, Greenwich, Conn.
06836; (203) 629-1980

Total assets managed	$705,000,000
Total discretionary assets	$705,000,000
Discretionary tax-exempt	$684,000,000
Types of accounts managed	CEF
Tax-exempt clients	82
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	1

Sound Shore Management Inc., an active equity and balanced manager, combines computer valuation screens and fundamental research to select high-quality, out-of-favor stocks selling at low p/es, both absolutely and relative to their historic norms vs. the market.

Harry Burn III is chief investment officer; Diana Maness is client contact.

Southeastern Asset Management
860 Ridgelake Blvd., Memphis, Tenn.
38119; (901) 761-2474

Total assets managed	$2,200,000,000
Discretionary tax-exempt	$1,678,000,000
401(k)/457 assets managed	$10,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	107
Minimum separate account	$10,000,000
No. of portfolio managers	5
Size of research staff	5

Southeastern Asset Management is an active equity and small-cap manager.

Its equity approach is value-oriented, using low p/e stocks and Graham & Dodd analysis. It chooses stocks whose prices are significantly below their intrinsic worth as determined by liquidating value, cash-generating ability and comparable sales price.

O. Mason Hawkins is chief investment officer; Frank N. Stanley III is client contact.

Southport Financial Corp.
2507 Post Road, Southport, Conn.
06490; (203) 255-3434

Total assets managed	$500,000,000
Total discretionary assets	$100,000,000
Total discretionary tax-exempt	$100,000,000
Equity real estate assets	$100,000,000
Types of accounts managed	CG
Tax-exempt clients	5
No. of portfolio managers	7

Southport Financial Corp., a real estate manager, follows a performance-oriented, management-intensive approach that takes advantage of inefficiencies and imperfections in the U.S. real estate market.

C. Wheaton Vaughan is chief investment officer and client contact.

Southwestern Life Insurance
P.O. Box 2699, Dallas, Texas
75221-2699; (214) 954-7111

Total assets managed	$2,680,000,000
Total discretionary assets	$2,680,000,000
Discretionary tax-exempt	$1,474,000,000
Pooled accounts	$10,000,000
GICs	$948,000,000
Annuities	$13,000,000
Other	$503,000,000
401(k)/457 assets managed	$165,000,000
Equity real estate assets	$50,000,000
Mortgage assets	$180,000,000
International fixed-income assets	$4,000,000
Equity indexed assets	$140,000,000
Fixed-income indexed assets	$1,000,000
Dedicated/immunized assets	$1,000,000,000
Tax-exempt clients:	
Pooled	3
Types of accounts managed	CFG
No. of portfolio managers	5
Size of research staff	2

Southwestern Life Insurance, primarily a fixed-income manager, uses sector analysis and interest rate anticipation in its investment decisions. The firm's equity approach uses sector rotation and tactical asset allocation.

Jerry Hitpas is chief investment officer; Frank L. "Chip" Gillis is client contact.

Sovran Bank
111 E. Main St., Richmond, Va.
23219; (804) 788-2388

Total assets managed	$6,149,000,000
Discretionary tax-exempt	$1,624,000,000
Pooled accounts	$650,000,000
Separate accounts	$974,000,000
401(k)/457 assets managed	$1,358,000,000
Tax-exempt clients:	
Commingled	565
Separate	75
Types of accounts managed	CEFGU
Minimum separate account	$250,000
No. of portfolio managers	10
Size of research staff	4

Sovran Bank is an active equity, active fixed-income and balanced manager.

Its equity approach stresses active management, seeking out undervalued, low-multiple issues with improving fundamentals. Its fixed-income approach concentrates on undervalued sectors, moderate duration decisions and yield curve analysis.

Robert V. Callahan is chief investment officer; James R. Springer is client contact.

Sovran Capital Management
12th & Main Streets, Richmond, Va.
23219; (804) 788-3515

Total assets managed	$2,430,000,000
Total discretionary assets	$2,430,000,000
Discretionary tax-exempt	$2,430,000,000
401(k)/457 assets managed	$110,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	78
Minimum separate account	$10,000,000
No. of portfolio managers	6

Sovran Capital Management is an active equity, active fixed-income and balanced manager.

Its equity approach focuses on low p/e, higher-yield stocks within fully invested, well-diversified portfolios. Its fixed-income approach uses three strategies: active sector rotation, moderate maturity changes and yield curve analyses.

Stuart Sachs is chief investment officer; Donald Steinbrugge and Thomas MacGillivray are client contacts.

Spears Benzak Salomon & Farrell
45 Rockefeller Plaza, New York, N.Y.
10111; (212) 903-1200

Total assets managed	$1,800,000,000
Discretionary tax-exempt	$925,000,000
401(k)/457 assets managed	$3,000,000
Types of accounts managed	CEFU
Tax-exempt clients	29
Minimum separate account	$20,000,000
No. of portfolio managers	4
Size of research staff	2

Spears Benzak Saloman & Farrell is an active equity and balanced manager.

Its investment approach is opportunistic, concentrating on long-term total return. Stock selection is value-oriented and based on fundamental analysis. Preservation of principal is a key consideration. The investment time horizon is two to three years.

William G. Spears is chief investment officer; Barbara D. Fiorito is client contact.

Spectrum Asset Management Inc.
369 San Miguel Drive, Suite 300,
Newport Beach, Calif. 92660; (714)
955-1121

Total assets managed	$54,000,000
Discretionary tax-exempt	$21,000,000
International equity assets	$1,000,000
Types of accounts managed	CEF
Tax-exempt clients	20
Minimum separate account	$500,000
No. of portfolio managers	2

Spectrum Asset Management Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach is risk-averse, using active asset allocation and seeking genuine values. Selection is bottom-up, with consideration to insider accumulation and technical support.

Its fixed-income approach adjusts maturity structure over a credit cycle. It uses only U.S. government issues with public utility equities used as surrogates to provide a rising yield floor.

R. Kelly Kelly is chief investment officer; Marc Kelly is client contact.

George B. Springman Inc.
44 Montgomery St., Suite 626, San
Francisco, Calif. 94104; (415)
326-5005

Total assets managed	$231,000,000
Total discretionary assets	$231,000,000
Discretionary tax-exempt	$231,000,000
Types of accounts managed	G
Tax-exempt clients	3
Minimum separate account	$10,000,000
No. of portfolio managers	1
Size of research staff	2

George B. Springman Inc., an active equity manager, stresses a bottom-up methodology, emphasizing reasonably valued, large-cap growth issues. Selected turnaround investments are utilized. The risk profile of portfolios is moderately conservative.

George B. Springman is chief investment officer and client contact.

Sprout Group
140 Broadway, New York, N.Y. 10005;
(212) 504-3600

Total assets managed	$300,000,000
Total discretionary assets	$300,000,000
Discretionary tax-exempt	$200,000,000
Types of accounts managed	CEFG
No. of portfolio managers	13

Sprout Group is an active equity and venture capital manager.

The firm seeks significant appreciation in investment in early-round and later-stage financings in companies with high growth potential, and leveraged and management buy-outs in mature companies.

Richard E. Kroon is chief investment officer; John Alamo is client contact.

The Stamford Co.
335 Madison Ave., New York, N.Y.
10017; (212) 297-1543

Total assets managed	$713,000,000
Total discretionary assets	$713,000,000
Discretionary tax-exempt	$358,000,000
Types of accounts managed	CEF
Tax-exempt clients	20
Minimum separate account	$1,000,000
No. of portfolio managers	5
Size of research staff	2

The Stamford Co. is an active equity, active fixed-income and real estate manager.

Its equity approach is value-oriented, focusing on low p/e, high cash flow, low price/book, high estimated earnings yield and neglected or out of favor stocks. Its fixed-income approach seeks to maximize current income, minimize capital risks, limit portfolio exposure to price volatility and maintain low portfolio turnover.

In real estate, the firm seeks prime commercial and farmland properties with high cash-on-cash return and solid appreciation potential.

Steven W. Kohlhagen is chief investment officer; David S. Allen is client contact.

Standish, Ayer & Wood Inc.
1 Financial Center, Boston, Mass.
02111; (617) 350-6100

Total assets managed	$10,023,000,000
Total discretionary assets	$10,023,000,000
Discretionary tax-exempt	$4,960,000,000
International equity assets	$41,000,000
International fixed-income assets	$328,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	124
Minimum separate equity account	$2,000,000
Minimum separate bond account	$100,000
No. of portfolio managers	12
Size of research staff	9

Standish, Ayer & Wood Inc. is an active equity, active fixed-income, balanced, active international equity, short-term and securitized manager.

The firm's value/growth equity approach combines Graham & Dodd analysis through use of an in-house quantitative model, mainly medium-cap growth stocks and sector rotation.

Its fixed-income approach uses intermediate maturities, sector analysis and non-Treasury/inefficient/innovative securities, and credit analysis.

Edward H. Ladd is chief investment officer; Karen Chandor is client contact.

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David J. Greene and Company
Registered Investment Advisors

Star Bank

Star Bank Center, Fifth and Walnut
Streets, Cincinnati, Ohio 45201
(513) 762-8931

Total assets managed	$2,345,000,000
Total discretionary assets	$2,345,000,000
Discretionary tax-exempt	$1,126,000,000
Pooled accounts	$152,000,000
Separate accounts	$974,000,000
401(k)/457 assets managed	$181,000,000
Real estate equity assets	$56,000,000
Tax-exempt clients	
Pooled	326
Separate	122
Types of accounts managed	CEFGU
Minimum separate account	$1,000,000
No. of portfolio managers	7
Size of research staff	7

Star Bank is an active domestic and international equity, active fixed-income, balanced, real estate and short-term manager.

Its equity approach uses growth stocks and sector rotation. Top-down analysis of economic sectors determines broad portfolio structure; stock selection is based on earnings momentum and earnings cash flow valuation. Its fixed-income approach uses interest rate anticipation, varying portfolios' average maturity and shifting between sectors based on longer-term strategic analysis.

In real estate, it buys marketable securities based on analysis of regional economies, various property types and projected cash flows.

B. Randolph Bateman is chief investment officer; Dennis A. Nahnsen is client contact.

The pension fund balance sheet will be published July 23.

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Starbuck, Tisdale & Associates

301 E. Carrillo St., Santa Barbara,
Calif. 93101; (805) 963-5963

Total assets managed	$139,000,000
Total discretionary assets	$134,000,000
Total discretionary tax-exempt	$68,000,000
401(k)/457 assets managed	$2,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	44
Minimum separate account	$500,000
No. of portfolio managers	2

Starbuck, Tisdale & Associates, an active equity and balanced manager, takes a value-oriented equity approach, using low p/e stocks and Graham & Dodd analysis. In fixed-income, it purchases instruments so the duration of the assets coincides with client needs.

L. David Tisdale is chief investment officer; Patrick S. Steele is client contact.

State Mutual Cos.

440 Lincoln St., Worcester, Mass.
01605; (508) 852-1000

Total assets managed	$8,125,000,000
Total discretionary assets	$8,125,000,000
Discretionary tax-exempt	$3,722,000,000
Pooled accounts	$123,000,000
GICs	$2,686,000,000
Annuities	$60,000,000
Other	$853,000,000
Equity indexed assets	$32,000,000
Types of accounts managed	CEFGU
Minimum separate account	$5,000,000
No. of portfolio managers	7
Size of research staff	18

State Mutual Cos. is an active and passive equity, active and passive fixed-income and short-term manager.

Active equity accounts are handled by Miller, Anderson & Sherrerd, which manages $128 million in tax-exempt assets (not included above) on the insurer's behalf.

In fixed-income, it offers active and passive management and immunization/dedication.

James R. McAuliffe is chief investment officer; Rich McGirr is client contact.

State Street Bank & Trust

225 Franklin St., Boston, Mass. 02110;
(617) 654-3953

Total assets managed	$62,195,000,000
Total discretionary assets	$62,195,000,000
Discretionary tax-exempt	$54,077,000,000
Pooled accounts	$20,722,000,000
Separate accounts	$33,355,000,000
401(k)/457 assets managed	$5,500,000,000
Real estate equity assets	$587,000,000
International equity assets	$7,595,000,000
International fixed-income assets	$113,000,000
Equity indexed assets	$21,878,000,000
Fixed-income indexed assets	$2,900,000,000
Dedicated/immunized assets	$941,000,000
Tax-exempt clients:	
Separate	220
Types of accounts managed	CEFGU
Minimum separate account	$10,000,000
No. of portfolio managers	41
Size of research staff	10

State Street Bank & Trust Co. offers active and passive strategies for domestic and international equity and fixed income, as well as balanced, tactical asset allocation, real estate, short-term and futures management.

Its equity approach is quantitatively driven, offering passive strategies, tilted or enhanced indexing and risk-constrained active disciplines designed to provide incremental returns over selected domestic and international benchmarks.

Its primary fixed-income approach is passive, focusing on intelligent risk management for active, immunized, dedicated and indexed income portfolios. The firm specializes in using financial futures to alter portfolio asset allocation and risk profile.

Its real estate approach uses closed-end, commingled and broadly diversified portfolios. It invests in equity real estate on a fee basis, using active management.

Nicholas A. Lopardo is chief investment officer; Peter Braun is client contact.

State Street Research & Management Co.

1 Financial Center, Boston, Mass.
02111; (617) 482-3920

Total assets managed	$15,664,000,000
Total discretionary assets	$15,664,000,000
Discretionary tax-exempt	$12,548,000,000
Dedicated/immunized assets	$515,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	61
Minimum separate account	$25,000,000
No. of portfolio managers	17
Size of research staff	25

State Street Research & Management Co. is an active equity, active fixed-income and balanced manager.

Its equity approach uses stock selection based on internally generated fundamental research, buying individual securities based on the most attractive relationship between expected growth and value. Its active fixed-income approach focuses on shifting duration based on interest rate trends while taking advantage of individual issue and sector opportunities.

Its subsidiary, Federal Street Financial Advisers Inc., uses the same investment philosophy, research and decision-making process.

Edward Bickford is client contact.

Key to abbreviations

C: Corporate
E: Educational endowment
F: Private foundation
G: Government
U: Union

Steele & Co. Ltd.

42 E. Gay St., Columbus, Ohio 43215;
(614) 461-5901

Total assets managed	$65,000,000
Total discretionary assets	$28,000,000
Discretionary tax-exempt	$20,000,000
Types of accounts managed	C
Tax-exempt clients	20
Minimum separate account	$350,000
No. of portfolio managers	2

Steele & Co. Ltd. is an active equity, active fixed-income, balanced and tactical asset allocation manager.

Its equity approach uses growth and emerging growth stocks, sector rotation and market timing. Technical analysis is emphasized. Its fixed-income approach uses interest rate anticipation and trend analysis based on technical analysis. Its fixed-income model allows swift market timing between long-term Treasuries and cash.

Michael B. Steele is chief investment officer and client contact.

Stein Roe & Farnham Inc.

1 S. Wacker Drive, Chicago, Ill. 60606;
(312) 368-7632

Total assets managed	$19,098,000,000
Total discretionary assets	$15,115,000,000
Discretionary tax-exempt	$6,306,000,000
International equity assets	$160,000,000
International fixed-income assets	$35,000,000
International cash assets	$15,000,000
Dedicated/immunized assets	$200,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	873
Minimum separate equity account	$600,000
Minimum separate bond account	$4,200,000
No. of portfolio managers	48
Size of research staff	34

Stein Roe & Farnham Inc. is an active equity, active and passive fixed-income, balanced, active international equity and fixed-income, and short-term manager.

The firm recommends portfolios consisting of core growth and opportunistic components. Core growth stocks exhibit superior historical and expected EPS growth characteristics while opportunistic stocks reflect characteristics such as turnarounds or undervalued assets. Its primary fixed-income approach is risk-averse and employs multiple disciplines (maturity optimization, sector rotation and credit selection) with a bias toward capital preservation in bear markets.

Timothy A. Schlindwein and H. Kent Mergler are chief investment officers; George J. Esser is client contact.

Sterling Capital Management

1770 Independence Center, Charlotte,
N.C. 28246; (704) 372-8670

Total assets managed	$852,000,000
Total discretionary assets	$852,000,000
Discretionary tax-exempt	$611,000,000
401(k)/457 assets managed	$17,000,000
Types of accounts managed	CEFG
Tax-exempt clients	92
Minimum separate account	$3,300,000
No. of portfolio managers	7

Sterling Capital Management is an equity-oriented/asset allocation manager. It uses an asset allocation discipline based on detailed analysis of business cycle indicators and comparison of expected returns among stocks, bonds and cash.

Equity selection is driven by a valuation model. Fixed-income investments are regarded as a source of liquidity, as vehicles for capital preservation and as a means to reduce overall volatility. Government and high-grade corporate bonds are used within an interest rate anticipation strategy.

W. Olin Nisbet is chief investment officer; J. Calvin Rivers is client contact.

Strategic Commodity Systems

4835 Towne Centre Drive, Suite 205,
Saginaw, Mich. 48604; (517)
791-1800

Total assets managed	$38,000,000
Tax-exempt assets managed:	
Total	$32,000,000
Assigned to other firms	$32,000,000
Types of accounts managed	G
Tax-exempt clients	2
Minimum separate account	$5,000,000

Strategic Commodity Systems is a futures manager of managers.

Its investment approach allocates assets to managers with different styles and risk/reward characteristics using a negative correlation method.

Glenn R. Crane is chief investment officer; James M. Stapleton is client contact.

Strategic Investment Partners Inc.

2000 K St. N.W., Suite 400,
Washington, D.C. 20006; (202)
785-2300

Total assets managed	$20,000,000
Total discretionary assets	$20,000,000
Discretionary tax-exempt	$20,000,000
International equity assets	$20,000,000
Types of accounts managed	C
Tax-exempt clients	1
Minimum separate account	$20,000,000
Size of research staff	4

Strategic Investment Partners Inc. is primarily a manager of managers. In addition to the assets above, $4.141 billion in U.S. tax-exempt assets are managed on the firm's behalf in active and passive equity and fixed-income, balanced, tactical asset allocation, real estate, short-term and active international equity and fixed-income accounts.

The firm uses investment advisers with the following equity approaches: growth, emerging growth, market timing/tactical asset allocation, quantitative, low p/e and Graham & Dodd.

The firm sets the duration of fixed-income portfolios in-house.

Hilda Ochoa-Brillembourg is chief investment officer and client contact.

Stratton Capital Management Inc.

4900 Main St., Suite 718, Kansas City,
Mo. 64112; (816) 561-5670

Total assets managed	$19,000,000
Total discretionary assets	$19,000,000
Discretionary tax-exempt	$19,000,000
401(k)/457 assets managed	$4,000,000
Types of accounts managed	CF
Tax-exempt clients	70
Minimum separate account	$50,000
No. of portfolio managers	2

Stratton Capital Management Inc., an active equity manager, uses technical analysis of individual issues to screen for stocks that appear to be under accumulation. Sell disciplines are emphasized. It uses interest rate anticipation to select short- to intermediate-term Treasuries.

John Stratton is chief investment officer; Brad Stratton is client contact.

Stratton Management Co.

610 W. Germantown Pike, Suite 361,
Plymouth Meeting, Pa. 19462; (215)
941-0888

Total assets managed	$525,000,000
Discretionary tax-exempt	$310,000,000
Types of accounts managed	CEF
Tax-exempt clients	35
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	1

Stratton Management Co., an active equity and balanced manager, uses a disciplined yield value approach. Yields must be 33% greater than the S&P 500 yield and the companies must pass stringent dividend growth and dividend payout ratios criteria. Stocks are sold when their yield hits the S&P yield.

James W. Stratton is chief investment officer; James G. Hesser is client contact.

Strong/Corneliuson Capital Management Inc.

100 Heritage Reserve, P.O. Box 2936,
Milwaukee, Wis. 53201; (414)
359-3400

Total assets managed	$5,230,000,000
Total discretionary assets	$5,230,000,000
Discretionary tax-exempt	$2,110,000,000
401(k)/457 assets managed	$450,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	83
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	2

Strong/Corneliuson Capital Management Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach uses growth and low p/e stocks and Graham & Dodd analysis. Its fixed-income approach is based on interest rate anticipation.

Richard S. Strong and William D. Corneliuson are chief investment officers; William G. Waller is client contact.

Stuyvesant Capital Management Corp.

50 Broad St., New York, N.Y. 10004;
(212) 422-8773

Total assets managed	$233,000,000
Total discretionary assets	$221,000,000
Discretionary tax-exempt	$149,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	74
Minimum separate account	$400,000
No. of portfolio managers	5

Stuyvesant Capital Management Corp. is an active equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

Its primary equity approach is a Graham & Dodd valuation model. The firm evaluates a company's business plus the growth and stability of earnings. In fixed-income, it seeks to anticipate opportunities that evolve during the interest rate cycle. A proprietary business index determines outlook regarding the economy, inflation and yield curve.

Donald von Wedel is chief investment officer and client contact.

Mutual funds will be the focus of a special report June 11.

STW Fixed Income Management
.O. Box 430, Carpinteria, Calif.
93013; (805) 566-9122

otal assets managed	$5,361,000,000
otal discretionary assets	$5,361,000,000
iscretionary tax-exempt	$4,186,000,000
01(k)/457 assets managed	$68,000,000
ypes of accounts managed	CEFGU
ax-exempt clients	71
inimum separate account	$30,000,000
o. of portfolio managers	3

STW Fixed Income Management, an active do-estic and international fixed-income manager, eks undervalued bonds considering quality, ma-rity, coupon and sector. Its long-duration product aximizes future income stream; short duration im-oses minimum return constraints.

William H. Williams is chief investment officer; tchell S. Little is client contact.

Sullivan, Morrissey & Mickle Capital Management Corp.
50 Park Ave., New York, N.Y. 10022;
(212) 832-7440

otal assets managed	$145,000,000
otal discretionary assets	$145,000,000
iscretionary tax-exempt	$122,000,000
ypes of accounts managed	CU
ax-exempt clients	18
inimum separate account	$1,000,000
o. of portfolio managers	3
ze of research staff	3

Sullivan, Morrissey & Mickle Capital Management orp., an active equity, active fixed-income and ba-nced manager, takes a value/growth-oriented ap-oach.

John F. Sullivan is chief investment officer and ent contact.

umisei SecPac Investment Advisors Inc.
00 S. Grand Ave., Suite 2200, Los
Angeles, Calif. 90071; (213)
229-1184

See entry for SECURITY PACIFIC INVESTMENT ROUP.

he Sumitomo Bank of California Trust Department
20 California St., San Francisco,
Calif. 94104; (415) 445-8090

otal assets managed	$123,000,000
otal discretionary assets	$123,000,000
iscretionary tax-exempt	$67,000,000
Separate accounts	$67,000,000
eal estate equity assets	$2,000,000
ortgage assets	$19,000,000
ax-exempt clients	7
ypes of accounts managed	C
o. of portfolio managers	2

The Sumitomo Bank of California Trust Depart-ent is an active equity, active fixed-income, ba-nced and real estate manager.

Its equity approach uses Graham & Dodd princi-es. Sector weightings generally are derived from acroeconomic considerations. Fundamental re-earch is combined with screens for earnings anges and relative p/e multiples. Alternative stra-gies based upon dividend income requirements d/or capital appreciation are offered.

Its fixed-income approach uses interest rate antic-ation. The bank actively manages a mortgage rtfolio.

Edward H. Turner Jr. is chief investment officer; illiam E. Sawin is client contact.

umitrust Security Pacific Investment Managers Inc.
00 S. Grand Ave., Suite 2200, Los
Angeles, Calif. 90071; (213)
229-1580

See entry for SECURITY PACIFIC INVESTMENT ROUP.

ummit Investment Management Ltd.
323 N. Mayfair Road, Milwaukee,
Wis. 53226; (414) 256-7433

otal assets managed	$41,000,000
iscretionary tax-exempt	$12,000,000
ypes of accounts managed	CEF
ax-exempt clients	26
inimum separate account	$250,000
o. of portfolio managers	2

Summit Investment Management Ltd. is an active uity, active fixed-income, balanced and short-rm manager. Tactical asset allocation is used r balanced accounts.

Its equity approach seeks undervalued stocks ased on a real cash flow return on investment odel that requires stocks have a minimum 20% oside potential in a stable market. Its intermediate aturity fixed-income style is based on interest rate nticipation using A or better rated bonds.

Marvin R. Swentkofske is chief investment officer; onald E. Stockhausen is client contact.

ummit Trust Co.
67 Springfield Ave., Summit, N.J.
07901; (201) 522-8428

Total assets managed	$1,829,000,000
Total discretionary assets	$1,103,000,000
Discretionary tax-exempt	$183,000,000
Pooled accounts	$60,000,000
Separate accounts	$123,000,000
International equity assets	$3,000,000
Equity indexed assets	$4,000,000
Tax-exempt clients:	
Commingled	106
Separate	249
Types of accounts managed	CEFU
No. of portfolio managers	6

Summit Trust Co. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach focuses primarily on larger companies with above-average growth prospects. Its fixed-income approach uses intermediate-term maturity, high-quality portfolios with a modest interest rate anticipation element.

Hilton M. Jervey is chief investment officer and client contact.

Sun Bank Capital Management
P.O. Box 3808, Orlando, Fla. 32802;
(407) 237-4352

Total assets managed	$5,000,000,000
Total discretionary assets	$5,000,000,000
Discretionary tax-exempt	$5,000,000,000
Pooled accounts	$1,000,000,000
Separate accounts	$4,000,000,000
Tax-exempt clients:	
Commingled	6
Separate	95
Types of accounts managed	CEFU
Minimum separate account	$10,000,000
No. of portfolio managers	8
Size of research staff	4

Sun Bank Capital Management is an active and passive equity and balanced manager.

Its value-oriented, large-cap approach emphasizes stocks with above-average historical expected growth and strong fundamentals that are selling at low relative prices.

Its fixed-income approach emphasizes the full range of maturities and shifts holdings on the basis of interest rate anticipation, sector swapping and yield curve analysis.

Anthony R. Gray is chief investment officer; Victor A. Zollo Jr. is client contact.

Sun Life of Canada Investment Management
200 University Ave., Toronto, Ontario
M5H 3C7; (416) 595-7809

Total assets managed	$2,491,000,000
Total discretionary assets	$2,491,000,000
Discretionary tax-exempt	$2,196,000,000
For subsidiaries of U.S. firms	$615,000,000
Equity real estate assets	$355,000,000
Mortgage assets	$258,000,000
Non-North American equities	$8,000,000
Dedicated/immunized assets	$35,000,000
Tax-exempt clients	184
U.S. subsidiaries	26
Types of accounts managed	CEFGU
Minimum separate account	$1,500,000
No. of portfolio managers	6
Size of research staff	8

Sun Life of Canada Investment Management Ltd. is an active equity, active fixed-income, balanced, real estate, active international equity and short-term cash manager.

Its equity approach stresses under-valued situations, using Graham & Dodd analysis with low p/e stocks and sector rotation. Its fixed-income approach emphasizes interest rate anticipation, sector swapping and immunization. Its real estate approach concentrates on acquisition of geographically diverse, good-quality industrial, commercial and office properties.

Donald T. Walcot is chief investment officer; Hans van Monsjou is client contact.

Systematic Financial Management Inc.
2 Executive Drive, Fort Lee, N.J.
07024; (201) 585-9290

Total assets managed	$135,000,000
Total discretionary assets	$135,000,000
Discretionary tax-exempt	$135,000,000
Types of accounts managed	CFU
Tax-exempt clients	140
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	1

Systematic Financial Management Inc. is an active equity and balanced manager.

Its primary equity approach is quantitative and value-oriented. It builds broadly diversified portfolios of undervalued companies that have superior "free" cash flow characteristics. Its fixed-income approach uses credit analysis and cash flow analysis in a quantitative approach to add value to balanced accounts. Interest rate anticipation is used.

Kenneth S. Hackel is chief investment officer; Jason J. Wallach is client contact.

T

Taplin, Canida & Habacht
1001 S. Bayshore Drive, Suite 2100,
Miami, Fla. 33131; (305) 379-2100

Total assets managed	$101,000,000
Total discretionary assets	$101,000,000
Discretionary tax-exempt	$27,000,000
Types of accounts managed	CFG
Tax-exempt clients	12
Minimum separate account	$1,000,000
No. of portfolio managers	3

Taplin, Canida & Habacht Inc. is an active equity, active fixed-income and balanced manager.

Its value-oriented equity approach blends quantitative tools and qualitative research. Using strict criteria, the firm seeks companies undervalued on an asset or earnings valuation basis. Its fixed-income approach focuses on high-quality issues with maturities ranging from an average of six to 12 years. Interest rate anticipation and sector analysis are used.

Alan M. Habacht is chief investment officer; Tere Alvarez Canida is client contact.

Target Investors Inc.
Wilton Executive Campus, 15 River
Road, Wilton, Conn. 06897; (203)
761-9600

Total assets managed	$160,000,000
Total discretionary assets	$160,000,000
Total discretionary tax-exempt	$160,000,000
Types of accounts managed	CG
Tax-exempt clients	6
Minimum separate account	$5,000,000
No. of portfolio managers	2

Target Investors Inc., an active equity manager, invests in small growth companies having relatively low p/es, strong balance sheets and positive earnings surprise potential.

Robert Zuccaro is chief investment officer; Mary Jane Boyle is client contact.

TCW Realty Advisers
400 S. Hope St., Suite 600, Los
Angeles, Calif. 90071; (213)
683-4200

Total assets managed	$3,165,000,000
Total discretionary assets	$3,165,000,000
Discretionary tax-exempt	$3,165,000,000
Equity real estate	$3,165,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	138
Minimum separate account	$50,000,000
No. of portfolio managers	10
Size of research staff	10

TCW Realty Advisors, a real estate manager, makes equity investments in existing properties and forward commitments and convertible mortgages in office, industrial and retail property types in targeted metropolitan areas nationwide.

Vincent F. Martin is chief investment officer; Bruce L. Ludwig is client contact.

Tealwood Asset Management
1000 Shelard Parkway, St. Louis Park,
Minn. 55426; (612) 544-9192

Total assets managed	$32,000,000
Total discretionary assets	$32,000,000
Discretionary tax-exempt	$5,000,000
401(k)/457 assets managed	$1,000,000
International equity assets	$2,000,000
Types of accounts managed	CEF
Tax-exempt clients	5
Minimum separate account	$250,000
No. of portfolio managers	2

Tealwood Asset Management is an active equity, passive fixed-income and balanced manager.

Its equity approach is value-oriented, focusing on growth stocks and employing Graham & Dodd analysis. The firm starts with a top-down approach, then seeks securities that look cheap in the scenario.

George Hust is chief investment officer; David Hust is client contact.

Team Bank
500 Throckmorton, Fort Worth, Texas
76113; (817) 884-4397

Total assets managed	$2,800,000,000
Discretionary tax-exempt	$580,000,000
401(k)/457 assets managed	$25,000,000
Equity real estate assets	$30,000,000
Types of accounts managed	CEFU
Tax-exempt clients	194
Minimum separate account	$1,000,000
No. of portfolio managers	5
Size of research staff	1

Team Bank, formerly Texas American Investment Management, is an active equity, passive fixed-income, balanced and real estate manager.

Its equity approach is based on a long-term, fundamental philosophy oriented toward growth through high-value investments. In fixed-income, it seeks maximum income and principal preservation through diversified investments in intermediate-term issues. Real estate investments are in high-quality income-producing properties offering competitive cash returns and significant potential for appreciation.

William M. Uhlemeyer is chief investment officer; Mark H. Haskin is client contact.

TEL Advisors Inc. of Virginia
2333 Old Ivy Road, Charlottesville, Va.
22901; (804) 977-4407

Total assets managed	$8,000,000
Total discretionary assets	$4,000,000
Discretionary tax-exempt	$500,000
Types of accounts managed	C
Tax-exempt clients	2
Minimum separate account	$1,000,000
No. of portfolio managers	1

TEL Advisors Inc. of Virginia is an active domestic and international equity, and balanced manager.

The firm seeks out valid growth stocks — those with a rising dividend growth stream historically and prospective favorable fundamental developments. Options are used.

Theodore E. Loud is chief investment officer and client contact.

Templeton International
500 E. Broward Blvd., Suite 2100, Fort
Lauderdale, Fla. 33394; (305)
764-7390

Total assets managed	$2,966,000,000
Total discretionary assets	$2,966,000,000
Total discretionary tax-exempt	$2,747,000,000
International equity assets	$2,659,000,000
International fixed-income assets	$88,000,000
Types of accounts managed	CEFG
Tax-exempt clients	51
Minimum separate account	$10,000,000
No. of portfolio managers	13
Size of research staff	13

Templeton International is an active international equity and fixed-income manager.

Its equity approach is bottom-up with relative value determined by a five-year projection of intrinsic worth. Graham & Dodd analysis is used. Its fixed-income approach uses interest rate anticipation and sector analysis. The approach is similar to its equity process, with some attention to interest rates and currency. Emphasis is always on quality.

John M. Templeton is chief investment officer; James R. Wood is client contact.

Texas Commerce Investment Management
600 Travis, Houston, Texas 77002;
(713) 236-4553

Total assets managed	$4,976,000,000
Total discretionary assets	$4,976,000,000
Discretionary tax-exempt	$2,326,000,000
Pooled accounts	$1,378,000,000
Separate accounts	$948,000,000
International equity assets	$19,000,000
Tax-exempt clients:	
Separate	62
Types of accounts managed	CEFGU
Minimum separate account	$5,000,000
No. of portfolio managers	9
Size of research staff	9

Texas Commerce Investment Management Co. is an active equity, active fixed-income, balanced and short-term manager.

Its equity styles are based on the beliefs that stock prices reflect patterns of earning acceleration and deceleration; valuation and market psychology can be used to determine optimal purchase/sale times; and that in-house fundamental research augmented with quantitative analysis is paramount.

In fixed income, a risk management approach is employed that increases the probability of maximizing total return, limits and controls loss of principal and minimizes variation vs. a benchmark index. Fundamental, expectational and technical analysis are used extensively.

Geoffrey P. Raymond is chief investment officer; Don G. Robinson is client contact.

Thompson/Rubinstein Investment Management
715 S.W. Morrison, Suite 605,
Portland, Ore. 97201; (503)
224-1488

Total assets managed	$245,000,000
Total discretionary assets	$245,000,000
Discretionary tax-exempt	$135,000,000
Types of accounts managed	CEFG
Tax-exempt clients	35
Minimum separate account	$500,000
No. of portfolio managers	4

Thompson/Rubinstein Investment Management Inc. is an active equity, active fixed-income and balanced manager.

The firm is a bottom-up, long-term investor that analyzes a company as if it were buying the business. Increasing earnings and dividends are important.

Its fixed-income approach is based on interest rate anticipation and uses U.S. Treasury/high-quality corporates with maturities no longer than 10 years, averaging between four and seven years.

F.L. Thompson and Richard A. Rubinstein are chief investment officers; Tim F. Ellis is client contact.

Thompson, Siegel & Walmsley Inc.
5000 Monument Ave., Richmond, Va.
23230; (804) 353-4500

Total assets managed	$2,278,000,000
Total discretionary assets	$2,278,000,000
Discretionary tax-exempt	$1,897,000,000
401(k)/457 assets managed	$1,559,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	148
Minimum separate account	$5,000,000
No. of portfolio managers	7

Thompson, Siegel & Walmsley Inc. is an active equity, active fixed-income, balanced and short-term manager.

It follows a conservative, risk-averse, value-oriented equity approach incorporating economic top-down analysis, valuation and fundamental security analysis and asset allocation tools as building block disciplines in a highly structured decision-making process.

Its fixed-income approach is also conservative and risk-averse, incorporating economic top-down analysis, fundamental credit analysis and sector spread analysis. Average maturities range from four to 12 years through the cycle. Quality is emphasized.

Matthew Thompson, John Siegel, S. Pierce Walmsley, Horace Whitworth II, Paul Ferwerda, Michael J. Dugan and Elizabeth Cabel Jennings are chief investment officers; Mr. Thompson is client contact.

Thompson, Unger & Plumb
4610 University Ave., Madison, Wis.
53705; (608) 231-1676

Total assets managed	$170,000,000
Total discretionary assets	$170,000,000
Discretionary tax-exempt	$78,000,000
401(k)/457 assets managed	$2,000,000
Types of accounts managed	CEF
Tax-exempt clients	64
Minimum separate account	$1,000,000
No. of portfolio managers	4

Thompson, Unger & Plumb Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach centers on growth industries and growth companies that have superior balance sheets and returns. It buys, holds and sells as market and p/e ratio changes provide opportunities for improvement.

Its fixed-income approach uses interest rate anticipation for longer-term trends.

Raymond F. Unger is chief investment officer; William J. Conroy is client contact.

Thorson, Brown & Plunkett
43 Arch St., Greenwich, Conn. 06830;
(203) 661-0666

Total assets managed	$325,000,000
Total discretionary assets	$325,000,000
Discretionary tax-exempt	$81,000,000
Types of accounts managed	CF
Tax-exempt clients	30
Minimum separate account	$5,000,000
No. of portfolio managers	4

Thorson, Brown & Plunkett Inc., an active equity and balanced manager, is theme-oriented. The firm emphasizes growth investments with a bias toward small and midsize companies and companies that tend to be underowned institutionally. It focuses on identifying emerging trends, with capital concentrated in sectors and companies that will benefit.

Its fixed-income approach is based on interest rate anticipation.

Petr A. Thorson and John H. Plunkett are chief investment officers; Pegeen M. Burgess is client contact.

Todd Investment Advisors
3160 First National Tower, Louisville,
Ky. 40202; (502) 585-3121

Total assets managed	$3,255,000,000
Total discretionary assets	$3,255,000,000
Discretionary tax-exempt	$3,203,000,000
Fixed-income indexed assets	$254,000,000
Dedicated/immunized assets	$39,000,000
Types of accounts managed	CEFG
Tax-exempt clients	29
Minimum separate account	$5,000,000
No. of portfolio managers	4

Todd Investment Advisors Inc. is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach is conservative, with a strong capital-preservation bent focusing on low-beta, large-cap and high-yield stocks. It uses aggressive shifts between sectors and industry groups. Valuation studies determine asset allocation, while quantitative measures control buying and selling.

Its fixed-income approach uses an enhanced bond index strategy offering close tracking of the selected benchmark with meaningful return enhancements.

Bosworth M. Todd Jr. is chief investment officer; Robert B. Cregor Jr. is client contact.

Torch Energy Advisors Inc.
1221 Lamar, Suite 1600, Houston,
Texas 77010; (800) 288-6724

Total assets managed	$700,000,000
Total discretionary assets	$700,000,000
Discretionary tax-exempt	$200,000,000
Types of accounts managed	CEF
Minimum separate account	$2,000,000
No. of portfolio managers	8

Torch Energy Advisors Inc., an oil and gas manager, acquires and manages direct investments in oil and gas properties. It builds diversified, non-leverage portfolios with the primary goals of above average rates of return and high cash flows in the early years.

J.P. Bryan is chief investment officer; Thomas Harper III is client contact.

Toronto Investment Management
26 Wellington St. E., Suite 900,
Toronto, Ontario M5E 1S2; (416)
865-0731

See entry for AMI ASSET MANAGEMENT INTERNATIONAL INC.

Touche Remnant Investment Management Ltd.
50 Rockefeller Plaza, New York, N.Y.
10020; (212) 758-6040

Total assets managed	$5,000,000,000
Total discretionary assets	$5,000,000,000
Discretionary tax-exempt	$10,000,000
International equity assets	$9,000,000
International cash assets	$1,000,000
Types of accounts managed	C

Tax-exempt clients	1
Minimum separate account	$10,000,000
No. of portfolio managers	33
Size of research staff	10

Touche Remnant Investment Management Ltd. is an active international equity and fixed-income and international real estate manager.

Its equity approach is active and top-down, emphasizing asset allocation among major world markets. Stock selection focuses on value buying. In fixed income, a sophisticated analysis of interest rates and currency forecasts decides country allocation. Maturities are adjusted to enhance yield.

In real estate, the firm offers direct investments, limited partnerships and securitized portfolios.

William P.M. Vincent is chief investment officer; William D. Rutherford is client contact.

Towneley Capital Management Inc.

144 E. 30th St., New York, N.Y.
10016; (212) 696-4130

Total assets managed	$880,000,000
Total discretionary assets	$880,000,000
Discretionary tax-exempt	$0
Minimum separate account	$10,000,000
No. of portfolio managers	1
Size of research staff	5

Towneley Capital Management Inc. is an active equity and balanced manager.

Its equity approach is value-oriented. For fixed income, the firm holds short-term (five- to seven-year), high-quality bonds until maturity.

Wesley G. McCain is chief investment officer; Sigrid Hess is client contact.

Townsend Asset Management Co. Inc.

45 Essex St., Hackensack, N.J.
07643; (201) 646-1511

Total assets managed	$32,000,000
Total discretionary assets	$19,000,000
Discretionary tax-exempt	$3,000,000
Types of accounts managed	CF
Tax-exempt clients	12
Minimum separate account	$50,000
No. of portfolio managers	1

Townsend Asset Management Co. Inc. is an active equity, passive fixed-income, balanced and short-term manager.

Its equity approach buys shares of small companies with below-average financial leverage relative to peers when available at prices less than their intrinsic worth. Graham & Dodd analysis is used. In fixed income, interest rate belts are tightly controlled.

James W. Townsend is chief investment officer and client contact.

Trafalgar Capital Management

277 Lakeshore Road E., Suite 401,
Oakville, Ontario L6J 1H9; (416)
842-5310

Total assets managed	$848,000,000
Total discretionary assets	$848,000,000
Discretionary tax-exempt	$765,000,000
For subsidiaries of U.S. firms	$500,000,000
Equity real estate assets	$167,000,000
Non-North American equities	$109,000,000
Equity indexed assets	$110,000,000
Fixed-income indexed assets	$167,000,000
Tax-exempt clients	24
U.S. subsidiaries	11
Types of accounts managed	CG
Minimum separate account	$17,000,000
No. of portfolio managers	6
Size of research staff	2

Trafalgar Capital Management, a Canadian firm, is a passive domestic and international equity, active and passive fixed-income, balanced, real estate, short-term and GIC fund manager.

Quantitative methods are used in its investment approaches. In real estate, it creates value through development or rehabilitation.

Tristram Lett is chief investment officer and client contact.

Trammell Crow Realty Advisors

3500 Trammell Crow Center, 2001
Ross Ave., Dallas, Texas
75201-2997; (214) 979-4293

Total assets managed	$17,000,000,000
Total discretionary assets	$2,000,000,000
Discretionary tax-exempt	$1,119,000,000
Equity real estate assets	$1,119,000,000
Types of accounts managed	CG
Tax-exempt clients	6
Minimum separate account	$100,000,000

Trammell Crow Realty Advisors, a real estate manager, offers multiple real estate investment strategies.

Carter Creech is client contact.

Transamerica Investment Services Inc.

1150 S. Olive, Los Angeles, Calif.
90015; (213) 742-3559

Total assets managed	$17,663,000,000
Total discretionary assets	$16,874,000,000
Discretionary tax-exempt	$7,783,000,000
Equity real estate assets	$13,000,000
Mortgage assets	$293,000,000
International fixed income	$1,039,000,000
Equity indexed assets	$61,000,000
Types of accounts managed	CFU
Minimum separate account	$100,000,000
No. of portfolio managers	12
Size of research staff	5

Transamerica Investment Services Inc. is an active equity, active fixed-income and short-term manager.

Gary U. Rolle is chief investment officer; Susan A. Silbert is client contact.

Trascott, Alyson, Craig Inc.

222 Cedar Lane, P.O. Box 278,
Teaneck, N.J. 07666; (201)
836-9000

Total assets managed	$25,000,000
Total discretionary assets	$25,000,000
Discretionary tax-exempt	$13,000,000
Types of accounts managed	C
Tax-exempt clients	14
Minimum separate account	$200,000
No. of portfolio managers	2

Trascott, Alyson, Craig Inc. is an active equity, balanced, tactical asset allocation and short-term manager.

Its equity approach is contrarian and uses Graham & Dodd analysis. Its fixed-income approach is based on interest rate anticipation, generally maintaining short duration.

Tracy Shagin is chief investment officer and client contact.

The Travelers Cos.

1 Tower Square, 7MS, Hartford, Conn.
06183; (203) 277-0111

Total assets managed	$44,321,000,000
Total discretionary assets	$39,189,000,000
Discretionary tax-exempt	$24,690,000,000
Pooled accounts	$2,581,000,000
Separate accounts	$569,000,000
GICs	$9,225,000,000
Annuities	$4,151,000,000
Other	$8,164,000,000
Equity real estate assets	$302,000,000
Mortgage assets	$63,000,000
International equity assets	$301,000,000
International fixed-income assets	$23,000,000
International cash assets	$479,000,000
Equity indexed assets	$1,040,000,000
Fixed-income indexed assets	$206,000,000
Dedicated/immunized assets	$7,000,000
Tax-exempt clients:	
Pooled	1,550
Separate	11
Types of accounts managed	CGU

The Travelers Cos. offers the following alternatives: active and passive equity and fixed-income, tactical asset allocation, balanced, active and passive international equity, passive international fixed-income, short-term, options and futures, direct placements, timberland and GIC management.

Separate account equity management is provided through The Travelers Investment Management Co. and Dillon Read Capital. Fixed-income investments are provided through Travelers Keystone Fixed Income Advisers and with the securities department of The Travelers.

Subsidiaries manage much of the commingled fund assets for the parent that are included in the data above. Assets listed for the subsidiaries, which are profiled separately, do not include these commingled assets.

Richard Shima is chief investment officer; John Prom is client contact.

Travelers Asset Management International

1 Tower Square-10PB, Hartford,
Conn. 06183-2030; (203) 277-9402

Total assets managed	$631,000,000
Total discretionary assets	$631,000,000
Discretionary tax-exempt	$0
No. of portfolio managers	3
Size of research staff	10

Travelers Asset Management International is an active and passive fixed-income and tactical asset allocation manager.

The firm offers asset/liability management for insurance companies and has extensive experience in the management of captive insurance company and specialty insurance assets. In addition to the assets above, the firm manages $163 million in a commingled fund for its parent, The Travelers Corp.

Glenn E. Murphy is chief investment officer and client contact.

Travelers Investment Management Co

90 State House Square, Suite 1200,
Hartford, Conn. 06103; (203)
277-5841

Total assets managed	$1,864,000,000
Total discretionary assets	$1,864,000,000
Discretionary tax-exempt	$600,000,000
International equity assets	$116,000,000
Equity indexed assets	$306,000,000
Fixed-income indexed assets	$100,000,000
Types of accounts managed	C
Tax-exempt clients	6
Minimum separate account	$10,000,000
No. of portfolio managers	11
Size of research staff	3

Travelers Investment Management Co. manages institutional funds through active, passive, enhanced index and derivative-based hedging strategies in markets worldwide.

The firm offers equity indexing, fixed-income indexing, enhanced index strategies, small-cap indexing, buy/write strategies, currency risk management, active fixed-income and quantitative, active value equity management strategies.

In addition to the assets above, the firm manages $1.1 billion in commingled accounts for Travelers Insurance.

Kent Kelley is chief investment officer; Phillip D. Leonardi is client contact.

Travelers Keystone Fixed Income Advisers

1 Tower Square-7MS, Hartford, Conn.
06183; (203) 277-0111

Total assets managed	$2,523,000,000
Total discretionary assets	$2,523,000,000
Discretionary tax-exempt	$125,000,000
Types of accounts managed	CGU
Tax-exempt clients	7
Minimum separate account	$5,000,000
No. of portfolio managers	7
Size of research staff	4

Travelers Keystone Fixed Income Advisers is a high-grade and high-yield bond manager emphasizing interest rate anticipation, with a secondary focus on return enhancement through quality and sector swaps and credit analysis. Fixed-income futures are used. Dedicated and South Africa-free portfolios are offered.

In addition to the assets above, the firm manages $254 million in commingled funds for The Travelers Corp.

Tom Drumm is chief investment officer; John Prom is client contact.

Trendstat Capital Management Inc.

10733 Sunset Office Drive, Suite 355,
St. Louis, Mo. 63127; (314)
822-3500

Total assets managed	$50,000,000
Total discretionary assets	$50,000,000
Discretionary tax-exempt	$18,000,000
401(k)/457 assets managed	$200,000
Types of accounts managed	CEFG
Tax-exempt clients	40
Minimum separate account	$100,000
No. of portfolio managers	1
Size of research staff	1

Trendstat Capital Management Inc. is an active equity, active fixed-income, balanced, tactical asset allocation and managed futures manager.

Its equity approach is based on emerging growth and low p/e stocks, using econometric models and reducing risk through market timing, statistical screens, stop-losses and options/futures hedging. Its fixed-income approach relies on five measurements of U.S. interest rates using trend-following models. Investments are in T-bonds or T-bills.

Thomas F. Basso is chief investment officer and client contact.

Trevor Stewart Burton & Jacobsen Inc.

90 Park Ave., Suite 901, New York,
N.Y. 10016; (212) 972-8150

Total assets managed	$510,000,000
Total discretionary assets	$510,000,000
Discretionary tax-exempt	$371,000,000
Types of accounts managed	CEFG
Tax-exempt clients	42
Minimum separate account	$5,000,000
No. of portfolio managers	3

Trevor Stewart Burton & Jacobsen Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach uses a macroeconomic overview to identify industries that will benefit from positive economic trends. Stocks that are cheap based on earnings, cash flow, dividends and/or assets per share are then selected.

Its fixed-income approach uses a macroeconomic overview to anticipate long-term interest rate trends and to position assets on the yield curve.

George W. Jacobsen Jr. is chief investment officer; Karl E. Schoeller is client contact.

Triangle Portfolio Associates

500 Grant St., Suite 4100, Pittsburgh,
Pa. 15258; (412) 234-7500

Total assets managed	$85,000,000
Total discretionary assets	$85,000,000
Discretionary tax-exempt	$85,000,000
Types of accounts managed	CFU
Tax-exempt clients	5
Minimum separate account	$5,000,000
No. of portfolio managers	1
Size of research staff	2

Triangle Portfolio Associates, an equity manager, takes an active and quantitative approach using systematic factor methods. Portfolios are constructed to provide superior performance by maximizing exposure to mispriced segments of the market.

Robert A. Wilk is chief investment officer; Nancy E. Diggins is client contact.

Trident Investment Management Inc.

888 S. West St., Anaheim, Calif.
92802; (714) 999-6811

Total assets managed	$21,000,000
Total discretionary assets	$21,000,000
Discretionary tax-exempt	$5,000,000
401(k)/457 assets managed	$3,000,000
Types of accounts managed	C
Minimum separate account	$300,000
No. of portfolio managers	2

Trident Investment Management Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach is primarily bottom-up, identifying fairly priced companies with strong balance sheets and histories of growth in earnings and dividends exceeding inflation. In fixed-income, it invests only in high-quality governments and corporates of generally intermediate maturity.

Philip Bourdillon is chief investment officer and client contact.

Trinity Capital Advisors Inc.

2710 One First Union Center, 301 S.
College St., Charlotte, N.C.
28202-6021; (704) 358-9020

Total assets managed	$87,000,000
Total discretionary assets	$87,000,000
Discretionary tax-exempt	$0
Minimum separate account	$1,000,000
No. of portfolio managers	2
Size of research staff	1

Trinity Capital Advisors Inc. is an active and passive fixed-income and short-term manager.

The firm segregates each account into three sectors: cash, core and total return. Using both fundamental and technical analysis, the firm manages funds to achieve capital stability, liquidity and yield maximization.

David M. Ralston is chief investment officer; Alex W. McAlister and Mark W. Whalen are client contacts.

Trinity Investment Management Corp.

1 Memorial Drive, Cambridge, Mass.
02142; (814) 355-1000

Total assets managed	$5,441,000,000
Total discretionary assets	$5,386,000,000
Discretionary tax-exempt	$5,306,000,000
401(k)/457 assets managed	$5,000,000
Types of accounts managed	CEFGU
Minimum separate account	$10,000,000
No. of portfolio managers	16
Size of research staff	11

Trinity Investment Management Corp., an active equity and balanced manager, is value-oriented and quantitative in its equity approach. Buys and sells are selected primarily by a composite ranking of eight proven submodels such as Graham & Dodd, Cashflow Plowback and Dividend Discount.

The fixed-income portion of the balanced accounts uses U.S. Treasury notes laddered out over five years.

Stanford Calderwood is chief investment officer and client contact.

Trusco Capital Management

50 Hurt Plaza, Suite 1400, Atlanta, Ga.
30303; (404) 586-6450

Total assets managed	$4,600,000,000
Total discretionary assets	$4,600,000,000
Discretionary tax-exempt	$4,600,000,000
401(k)/457 assets managed	$550,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	200
Minimum separate account	$5,000,000
No. of portfolio managers	12
Size of research staff	6

Trusco Capital Management is an active equity, active and passive fixed-income, balanced and short-term manager.

Its equity approach is bottom-up, screening a large universe of stocks for investment based on valuation levels and earnings trends.

Its primary fixed-income approach adds value by identifying and acting upon opportunity and risk. Yield curve analysis, sector swaps and arbitrage activity is used.

Douglas S. Phillips is chief investment officer; Bob M. Farmer and Paul L. Robertson III are client contacts.

Trust Advisory Group Inc.

1 Morningside Drive N., Westport,
Conn. 06880; (203) 454-7171

Total assets managed	$440,000,000
Discretionary tax-exempt	$440,000,000
Assets assigned to other firms	$440,000,000

Trust Advisory Group Inc. is a manager of managers.

Its fixed-income approach emphasizes competitiveness, liquidity and high investment quality of the underlying GIC contracts selected.

James C. Ryan is the chief investment officer.

Trust Co. of the West

400 S. Hope St., Los Angeles, Calif.
90071; (213) 683-4000

Total assets managed	$13,766,000,000
Total discretionary assets	$13,766,000,000
Discretionary tax-exempt	$12,819,000,000
Pooled accounts	$3,340,000,000
Separate accounts	$9,479,000,000
International equity assets	$128,000,000
Dedicated/immunized assets	$72,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	
Pooled accounts	178
Separate accounts	79
Minimum separate account	$20,000,000
No. of portfolio managers	23
Size of research staff	33

Trust Co. of the West is an active equity, active and passive fixed-income, balanced, active international equity and fixed-income, short-term, convertible securities, private placements, oil and gas and bankrupt securities manager.

Its equity approach employs sector rotation, using top-down analysis with the goal of identifying changes before they are generally perceived and shifting between asset categories and industries to take advantage of change.

Its fixed-income approach uses interest rate anticipation and is top-down with a goal to catch cyclical shifts in interest rates. Options are used.

Ernest Ellison is chief investment officer; Thomas E. Larkin Jr. is client contact.

Trustcorp Bank, Ohio

3 Seagate, Toledo, Ohio 43603; (419)
259-8142

Total assets managed	$3,774,000,000
Total discretionary assets	$2,230,000,000
Discretionary tax-exempt	$507,000,000
Pooled accounts	$226,000,000
Separate accounts	$281,000,000
401(k)/457 assets managed	$150,000,000
International equity assets	$21,000,000
Tax-exempt clients:	
Commingled	714
Separate	714
Types of accounts managed	CEFGU
Minimum separate account	$1,000,000
No. of portfolio managers	11

Trustcorp Bank, Ohio is an active domestic and international equity and fixed-income, balanced and short-term manager.

Its primary equity approach is growth stock and quantitative-oriented. Its fixed-income approach uses interest rate anticipation, concentrating on high current income and intermediate maturities.

Theodore T. Hahn is chief investment officer; Julie B. Higgins is client contact.

TSA Capital Management

700 Wilshire Blvd., Los Angeles, Calif.
90017; (213) 614-7225

Total assets managed	$3,735,000,000
Total discretionary assets	$3,735,000,000
Discretionary tax-exempt	$3,722,000,000
Types of accounts managed	CEFG
Tax-exempt clients	24
Minimum separate account	$20,000,000
No. of portfolio managers	8
Size of research staff	3

TSA Capital Management is an active equity, balanced and tactical asset allocation manager.

Its primary equity approach is disciplined and pragmatic. A number of proprietary quantitative disciplines are used for security valuation and for measurement of risk levels.

Roger G. Clarke is chief investment officer; Richard Boling is client contact.

Tukman Capital Management

60 E. Sir Francis Drake Blvd.,
Larkspur, Calif. 94939; (415)
461-6833

Total assets managed	$600,000,000
Total discretionary assets	$600,000,000
Discretionary tax-exempt	$500,000,000
Types of accounts managed	CEFG
Tax-exempt clients	35
Minimum separate account	$10,000,000
No. of portfolio managers	2

Tukman Capital Management, an active equity manager, is value-oriented, focusing on highly profitable, cash-generating companies purchased at moderate p/e ratios.

Melvin T. Tukman is chief investment officer; Daniel L. Grossman is client contact.

Turner Neill Investment Partners Inc.

300 Berwyn Park, Suite 120, Berwyn,
Pa. 19312; (215) 251-0268

Total assets managed	$130,000,000
Total discretionary assets	$130,000,000
Discretionary tax-exempt	$130,000,000
Types of accounts managed	CEFU
Tax-exempt clients	7
Minimum separate account	$5,000,000
No. of portfolio managers	4
Size of research staff	4

Turner Neill Investment Partners Inc. is an active equity, active fixed-income and balanced manager.

The equity approach uses quantitative and qualitative techniques to focus on exploiting market inefficiencies and controlling risk. In fixed-income, duration of a client's portfolio is matched to the appropriate indexes through sophisticated computer techniques.

Robert E. Turner Jr. is chief investment officer; K. Lawrence Neill is client contact.

Tyndall-Newport Management

601 California St., San Francisco,
Calif. 94108; (415) 781-5801

Total assets managed	$150,000,000
Total discretionary assets	$150,000,000
Discretionary tax-exempt	$0
Minimum separate account	$1,000,000
No. of portfolio managers	3

Tyndall-Newport Management is an active domestic and international equity and balanced manager.

Its equity approach is to buy quality growth companies in the world's growth areas, primarily the Pacific Basin. Its fixed-income approach uses interest rate anticipation.

John M. Mussey is chief investment officer and client contact.

U

UBS Phillips & Drew International Investment

Triton Court, 14 Finsbury Square,
London EC2A 1PD U.K.;
01-588-7114

Total assets managed	$215,000,000
Total discretionary assets	$215,000,000
Discretionary tax-exempt	$5,000,000
International equity assets	$4,000,000
Types of accounts managed	F
Tax-exempt clients	1
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	35

UBS Phillips & Drew International Investment Ltd is an active international manager.

Its value-oriented equity approach is based on fundamental analysis of macroeconomic and company-specific factors, focusing on stocks selling at below-market valuations with sound or improving fundamentals and strong growth potential. Its primary fixed-income approach is based on identifying currencies that are competitive, have high yields, low inflation and sound economic and monetary policies. Options and fixed-income futures are used.

James P. McCaughan is chief investment officer; George M. Jamgochian is client contact.

Union Bank

530 B St. San Diego, Calif. 92101;
(619) 230-3303

Total assets managed	$4,950,000,000
Total discretionary assets	$650,000,000
Discretionary tax-exempt	$650,000,000
Pooled accounts	$437,000,000
Separate accounts	$213,000,000
401(k)/457 assets managed	$460,000,000
Mortgage assets	$9,000,000
International equity assets	$16,000,000
Tax-exempt clients:	
Commingled	117
Separate	193
Types of accounts managed	CFGU
Minimum separate account	$5,000,000
No. of portfolio managers	15
Size of research staff	2

Union Bank is an active equity, active fixed-income, balanced, short-term and active international equity manager.

Its equity approach is driven by value momentum. The firm seeks to identify attractive prices using fundamental and quantitative techniques, then uses momentum analysis in the buy/sell decision.

Its fixed-income approach is based on sector analysis. The firm employs an active selection process emphasizing market and credit analysis, with a focus on interest rate movements and market inefficiencies related to credit and call protection features.

Benjamin Hitz Jr. is chief investment officer; Clark R. Gates is client contact.

Union Capital Management

1100 Poydras St., Suite 1400, New
Orleans, La. 70163; (504) 585-7321

Total assets managed	$33,000,000
Total discretionary assets	$33,000,000
Total tax-exempt assets	$33,000,000
Types of accounts managed	G
Tax-exempt clients	2
Minimum separate account	$1,000,000
No. of portfolio managers	1

Union Capital Management, a passive fixed-income manager, uses a stratified sampling that provides the most efficient method of replicating bond market returns. Limited emphasis is placed on interest rate forecasts.

Kenneth J. Canepa is chief investment officer and client contact.

The Union Central Life Insurance Co.

P.O. Box 179, Cincinnati, Ohio 45201;
(513) 595-2200

Total assets managed	$3,017,000,000
Total discretionary assets	$1,423,000,000
Discretionary tax-exempt	$1,423,000,000
Pooled accounts	$76,000,000
GICs	$67,000,000
Annuities	$21,000,000
Other	$1,259,000,000
401(k)/457 assets managed	$470,000,000
Equity real estate assets	$14,000,000
Mortgage assets	$173,000,000
Types of accounts managed	CEFGU
No. of portfolio managers	4

The Union Central Life Insurance Co. is an equity and fixed-income manager.

Its equity approach is growth at a price, analyzing historical and future profitability and growth in comparison to current p/e on normalized earnings and additional valuation and technical factors.

Its fixed-income approach uses sector analysis to determine bond sectors that provide the best risk/reward relationships, and credit analysis of corporate bonds or individual analysis of mortgage-backed securities to determine value.

Its real estate approach is limited to the origination of high-quality commercial mortgages for offices, retail, apartment and warehouse properties.

George Clucas is chief investment officer; Jerome C. Schmidt is client contact.

Union Labor Life Insurance

111 Massachusetts Ave. N.W.,
Washington, D.C. 20001; (202)
682-0900

Total assets managed	$2,069,000,000
Total discretionary assets	$1,725,000,000
Discretionary tax-exempt	$1,725,000,000
Pooled accounts	$808,000,000
GICs	$415,000,000
Annuities	$200,000
Other	$502,000,000
Mortgage assets	$442,000,000
Tax-exempt clients:	
Pooled	444
Types of accounts managed	U
Minimum separate account	$5,000,000
No. of portfolio managers	7
Size of research staff	8

Union Labor Life Insurance Co. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is value-oriented and opportunistic, targeting out-of-favor stocks of sound companies.

Its fixed-income approach is value-oriented within the market sectors of its separate accounts. Interest rate anticipation is limited to 25% of assets.

Its mortgage account invests in long-term first mortgages.

Herbert C. Canapary is chief investment officer; John Stephan is client contact.

United Capital Management

1 United Bank Center, 1700 Lincoln
St., Suite 3301, Denver, Colo.
80274-0077; (303) 831-9474

Total assets managed	$4,257,000,000
Total discretionary assets	$4,257,000,000
Discretionary tax-exempt	$4,112,000,000
Types of accounts managed	CFGU
Tax-exempt clients	37
Minimum separate equity account	$20,000,000
Minimum separate bond account	$10,000,000
No. of portfolio managers	5
Size of research staff	1

United Capital Management is an active equity, active fixed-income and balanced manager.

It is a contrarian/value equity investor, seeking price-depressed, out-of-favor stocks that have major rebound potential over three years. A strict sell discipline is followed.

Its fixed-income approach is active and long-term, focusing on major changes in interest rate trends. Business cycle analysis provides the framework for the rate outlook.

W. Lon Schreur is chief investment officer; Denise Bryant is client contact.

United Investment Counsel

101 Prescott St., Babson-United
Building, Wellesley Hills, Mass.
02181; (617) 235-0900

Total assets managed	$2,500,000,000
Total discretionary assets	$350,000,000
Discretionary tax-exempt	$250,000,000
Types of accounts managed	CEFG
Tax-exempt clients	60
Minimum separate account	$300,000
No. of portfolio managers	11
Size of research staff	8

United Investment Counsel is an active equity, active fixed-income and balanced manager.

Its equity approach focuses on growth and emerging growth stocks, recommending a diversified portfolio in line with client objectives. Its fixed-income approach uses interest rate anticipation.

Donald G. Parsons is chief investment officer; Cassie M. Grant is client contact.

United Jersey Bank

223 Moore St., Hackensack, N.J.
07602; (201) 646-5631

Total assets managed	$1,400,000,000
Total discretionary assets	$1,000,000,000
Discretionary tax-exempt	$562,000,000
Pooled accounts	$152,000,000
Separate accounts	$410,000,000
Tax-exempt clients:	
Commingled	200
Separate	248
Types of accounts managed	CEFU
Minimum separate account	$500,000
No. of portfolio managers	14

United Jersey Bank is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach uses low p/e stocks and may vary the capitalization stressed over long cycles. Sector rotation is used, with each portfolio manager having equity research/sector responsibility. Its fixed-income approach uses interest rate anticipation and sector analysis. Investment-grade securities are used as alternatives to Treasuries on a relative basis.

John W. Gustafson is chief investment officer; Robert T. Garty is client contact.

United Missouri Investment Counsel Service

P.O. Box 419226, Kansas City, Mo.
64141-6226; (816) 556-7341

Total assets managed	$5,152,000,000
Total discretionary assets	$5,152,000,000
Total discretionary tax-exempt	$3,266,000,000
Types of accounts managed	CEFGU
Minimum separate account	$500,000
No. of portfolio managers	14
Size of research staff	5

United Missouri Investment Counsel Service is an active and passive equity, passive fixed-income, balanced and short-term manager.

Its equity approach focuses on companies that have exhibited above-average unit sales growth and pricing flexibilities and maintain strong balance sheet characteristics. Its fixed-income approach emphasizes maturity shifts based on the interest rate outlook. Key forecasting tools are related to manufacturing operating rates.

Stuart L. Murdock is chief investment officer; David B. Anderson is client contact.

United of Omaha

Mutual of Omaha Plaza, Omaha, Neb.
68175; (402) 978-5138

Total assets managed	$4,002,000,000
Total discretionary assets	$1,750,000,000
Discretionary tax-exempt	$1,750,000,000
Pooled accounts	$8,000,000
GICs	$1,027,000
Annuities	$359,000
Other	$356,000
401(k)/457 assets managed	$170,000,000
Tax-exempt clients	15
Types of accounts managed	C
No. of portfolio managers	6
Size of research staff	6

United of Omaha is an active equity and passive fixed-income manager.

Its equity approach focuses on investment in established companies with strong earnings growth records. Its fixed-income approach controls interest rate risk through duration matching, and credit risk through extensive credit analysis.

John Maginn is chief investment officer; John Fischer is client contact.

U.S. Bank

Main and Franklin Streets, Johnstown,
Pa. 15901; (814) 533-5397

Total assets managed	$101,000,000
Total discretionary assets	$101,000,000
Discretionary tax-exempt	$60,000,000
Separate accounts	$60,000,000
Equity indexed assets	$1,000,000
Fixed-income indexed assets	$5,000,000
Tax-exempt clients	63
Types of accounts managed	CEFGU
Minimum separate account	$100,000
No. of portfolio managers	2
Size of research staff	1

U.S. Bank is an active and passive equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

Its bottom-up equity approach picks stocks using a value orientation. For fixed-income, it uses laddered maturities with sector diversification.

Judith Duchene is chief investment officer; Darryl Myers is client contact.

United States National Bank of Galveston

P.O. Box 179, Galveston, Texas
77553; (409) 763-1151

Total assets managed	$500,000,000
Total discretionary assets	$500,000,000
Discretionary tax-exempt	$240,000,000
Pooled accounts	$55,000,000
Separate accounts	$185,000,000
401(k)/457 assets managed	$5,000,000
International equity assets	$10,000,000
Tax-exempt clients:	
Commingled	200
Separate	140
Types of accounts managed	CEF
Minimum separate account	$1,000,000
No. of portfolio managers	1
Size of research staff	1

United States National Bank of Galveston is an active equity, active fixed-income, balanced and short-term manager.

A long-term investor, the bank uses a value-oriented equity approach. It seeks issues allowing considerable downside risk protection by providing comparatively high-dividend yields and low p/e multiples. Its fixed-income approach uses interest rate anticipation and sector analysis. Options are used.

Freddie B. Meier is client contact.

United States Trust Co.

40 Court St., Boston, Mass. 02108;
(617) 726-7250

Total assets managed	$1,540,000,000
Total discretionary assets	$850,000,000
Discretionary tax-exempt	$850,000,000
Pooled accounts	$150,000,000
Separate accounts	$700,000,000
401(k)/457 assets managed	$25,000,000
Tax-exempt clients:	
Commingled	110
Separate	120
Types of accounts managed	CEFGU
Minimum separate account	$5,000,000
No. of portfolio managers	10

United States Trust Co. is an active equity, balanced and short-term manager.

Its primary equity philosophy combines a top-down approach to sector allocation and a value-oriented approach to stock selection. Its primary fixed-income approach uses interest rate anticipation.

James McPartland is client contact.

U.S. Trust of California

555 S. Flower St., Suite 2700, Los
Angeles, Calif. 90071; (213)
488-4003

Total assets managed	$575,000,000
Total discretionary assets	$575,000,000
Discretionary tax-exempt	$145,000,000
Separate accounts	$145,000,000
Tax-exempt clients	27
Types of accounts managed	CEF
Minimum separate account	$5,000,000
No. of portfolio managers	6
Size of research staff	3

U.S. Trust of California is an active fixed-income and balanced manager.

Its equity approach is based on sector rotation, concentrating in sectors responding to current market themes and undergoing substantial price revaluation. Its fixed-income approach is based on reacting to changes in interest rates and emphasizes maturity selection, credit analysis and the use of undervalued or overlooked opportunities.

Bill Hildeburn is chief investment officer; Mark K. Talt is client contact.

U.S. Trust Co. of New York

114 W. 47th St., New York, N.Y.
10036; (212) 852-3913

Total assets managed	$17,500,000,000
Total discretionary assets	$17,500,000,000
Discretionary tax-exempt	$2,500,000,000
Pooled accounts	$1,875,000,000
Separate accounts	$625,000,000
International equity assets	$50,000,000
Equity indexed assets	$20,000,000
Fixed-income indexed assets	$100,000,000
Tax-exempt clients:	
Commingled	75
Separate	110
Types of accounts managed	CEFGU
Minimum separate account	$3,000,000
No. of portfolio managers	10
Size of research staff	15

U.S. Trust Co. of New York is an active and passive equity, active and passive fixed-income, balanced, active international equity and short-term manager.

Its stock selection methodology uses strategies as valuation benchmarks and themes as indicators of trends generating long-term value. Portfolios are diversified. It has a slightly contrarian perspective. Its active fixed-income approach uses total-rate-of-return management over a interest rate cycle, focusing on rate forecasting as well as credit and sector/spread analysis.

Frederick B. Taylor is chief investment officer; Brian J. Keeney is client contact.

United Trust Fund

701 Brickell Ave., Miami, Fla. 33131;
(305) 358-7711

Total assets managed	$310,000,000
Discretionary tax-exempt	$0
No. of portfolio managers	8
Size of research staff	3

United Trust Fund is a fixed-income and real estate manager.

Its fixed-income approach is passive, taking long-term, fixed-rate securities or other credit instruments and making continuous investment without regard to market timing in a flat-rate market. In an escalating market, it will go short and roll.

Its real estate approach is guaranteed return through credit leases.

James Nolan is chief investment officer and client contact.

Unity Management Inc.

2001 Marcus Ave., Lake Success,
N.Y. 11042; (516) 437-2200

Total assets managed	$500,000,000
Total discretionary assets	$500,000,000
Discretionary tax-exempt	$500,000,000
Types of accounts managed	CGU
Tax-exempt clients	65
Minimum separate account	$1,000,000
No. of portfolio managers	4

Unity Management Inc. is an active equity, active fixed-income, balanced and short-term manager.

The firm focuses on NYSE large-cap stocks, combining fundamental and technical analysis in a top-down, value-oriented, sector rotation approach.

Its fixed-income approach concentrates on interest rate forecasting, duration adjustment, sector analysis and security analysis in selecting fixed-income instruments to maximize returns within client risk constraints.

Irving Decter is chief investment officer; Janice H. Mahood and Thomas J. Foley are client contacts.

UNUM Life Insurance

2211 Congress St., Portland, Maine
04122; (207) 770-2211

Total assets managed	$7,759,000,000
Total discretionary assets	$7,759,000,000
Discretionary tax-exempt	$4,304,000,000
Pooled accounts	$82,000,000
GICs	$1,428,000,000
Annuities	$196,000,000
Other	$2,598,000,000
401(k)/457 assets managed	$379,000,000
Tax-exempt clients:	
Pooled	32
No. of portfolio managers	4
Size of research staff	20

UNUM Life Insurance is an active equity, passive fixed-income, balanced, real estate, short-term and GIC manager.

Its equity approach focuses on growth industries augmented by interest rate and inflation-hedged stocks. Its primary fixed-income approach uses sector analysis and is oriented toward private placements and commercial mortgages.

Peter J. Moynihan is chief investment officer; Bruce W. Gordon is client contact.

USF&G Realty Advisors

100 S. Charles St., Suite 1100,
Baltimore, Md. 21201; (301)
752-3300

Total assets managed	$1,100,000,000
Discretionary tax-exempt	$0
No. of portfolio managers	15
Size of research staff	2

USF&G Realty Advisors, a real estate manager, pursues joint venture financing opportunities following a strategy which includes diversification by product type, location and stage of development. Emphasis is placed on high-quality construction and sponsorship.

Daniel B. Kohlhepp is chief investment officer and client contact.

V

Valley Bank of Nevada Trust Division

P.O. Box 98555, Las Vegas, Nev.
89193-8555; (702) 654-7071

Total assets managed	$1,700,000,000
Discretionary tax-exempt	$97,000,000
Separate accounts	$97,000,000
401(k)/457 assets managed	$3,000,000
Tax-exempt clients	700
Types of accounts managed	EFG
Minimum separate account	$150,000
No. of portfolio managers	5
Size of research staff	5

Valley Bank of Nevada Trust Division is a passive equity, passive fixed-income, balanced, tactical asset allocation and short-term manager.

Using proprietary market indicators, the bank determines what allocation to have and when to implement that allocation. For the fixed-income allocation, issues are chosen based on interest rate anticipation and yield curve analysis, and usually are held until maturity.

Blayne A. Ence is chief investment officer and client contact.

Valley Capital Management

P.O. Box 71, Phoenix, Ariz. 85001;
(602) 261-1471

Total assets managed	$4,878,000,000
Total discretionary assets	$2,822,000,000
Discretionary tax-exempt	$641,000,000
401(k)/457 assets managed	$131,000,000
Equity real estate assets	$5,000,000
Mortgage assets	$250,000,000
Types of accounts managed	CEFG
Tax-exempt clients	244
Minimum separate account	$300,000
No. of portfolio managers	13
Size of research staff	3

Valley Capital Management is an active equity, active fixed-income, balanced, real estate and short-term manager.

Its equity approach is value-oriented, focusing on growth companies positioned to benefit from long-term trends. Its fixed-income approach uses interest rate anticipation, with sector selection adding incremental return.

In real estate, the firm concentrates on Arizona-based commercial mortgages with adjustable interest rates, call provisions and equity participation.

Lyle D. Wurtz is chief investment officer, Russell C. Gunderson is client contact for institutional trust; Molly M. Killoren, for investment management.

Value Line

711 Third Ave., New York, N.Y. 10017;
(212) 661-9653

Total assets managed	$3,700,000,000
Total discretionary assets	$500,000,000
Discretionary tax-exempt	$500,000,000
Types of accounts managed	CFGU
Minimum separate account	$1,000,000
No. of portfolio managers	15
Size of research staff	75

Value Line is an active equity, active fixed-income, balanced, tactical asset allocation and short-term manager.

Its primary equity approach focuses on company earnings and stock price momentum to identify undervalued growth and emerging growth stocks.

In fixed-income, economic developments including inflationary, interest rate and exchange rate trends, determine the maturity structure of a portfolio. U.S. government and agency issues with a maturity of more than 10 years are emphasized. The firm has expertise in mortgage-backed securities and corporate preferreds.

Sam Eisenstadt is chief investment officer; David Campbell and Charles Heebner are client contacts for equity and fixed-income investments; Pete DeLone is new business contact.

Value Matrix Management

360 Madison Ave., New York, N.Y.
10017; (212) 907-0150

Total assets managed	$46,000,000
Total discretionary assets	$46,000,000
Discretionary tax-exempt	$28,000,000
401(k)/457 assets managed	$9,060,000
Types of accounts managed	CF
Tax-exempt clients	12
Minimum separate account	$250,000
No. of portfolio managers	3

ize of research staff	3

Value Matrix Management, an active equity man- ger, is a pure Graham & Dodd value manager. It ses six screens to identify securities selling at considerable discount to intrinsic value based on arnings dividends, return on equity and book alue.

The firm manages fixed-income as an accommo- ation to clients, buying short- and intermediate- erm U.S. government notes.

David Katz is chief investment officer; Jill Melmed nd John Gates are client contacts.

ValueQuest Ltd.

Roundy's Hill, Marblehead, Mass.
01945; (617) 631-5508

otal assets managed	$328,000,000
otal discretionary assets	$328,000,000
otal discretionary tax-exempt	$320,000,000
nternational equity assets	$11,000,000
ypes of accounts managed	CE
ax-exempt clients	3
linimum separate account	$10,000,000
o. of portfolio managers	2
ize of research staff	3

ValueQuest Ltd., an active domestic and interna- onal equity manager, follows a contrarian value pproach, concentrating on the lower quintile of the narket in undervalued earnings, assets and quality. focuses on intrinsic value, using a combination of creens and fundamental analysis, with a three- to ve-year time horizon.

Katherine Busboom Magrath is chief investment fficer and client contact.

/anbrit Investment Management

100 Melville St., Suite 620,
Vancouver, British Columbia V6E
4A6; (604) 687-1393

See entry for AMI ASSET MANAGEMENT IN- ERNATIONAL INC.

/an Cleef Jordan & Wood

30 Park Ave., New York, N.Y. 10169;
(212) 986-2600

otal assets managed	$215,000,000
otal discretionary assets	$175,000,000
iscretionary tax-exempt	$25,000,000
01(k)/457 assets managed	$5,000,000
nternational equity assets	$1,000,000
nternational fixed income assets	$1,000,000
ypes of accounts managed	CEF
ax-exempt clients	40
linimum separate account	$400,000
o. of portfolio managers	6
ize of research staff	2

Van Cleef Jordan & Wood Inc. is an active equity, ctive fixed-income and balanced manager with pecial emphasis on growth, value and sector ro- tion. Its fixed-income management consists of nifting duration, maturity, sector rotation and antici- ation of quality upgrades and downgrades.

Richard F.F. Nichols Jr. is chief investment officer nd client contact.

/an Deventer & Hoch

20 N. Brand Blvd., Glendale, Calif.
91203; (818) 247-5330 or (213)
245-7461

otal assets managed	$1,454,000,000
iscretionary tax-exempt	$638,000,000
ypes of accounts managed	CEFGU
ax-exempt clients	799
linimum separate account	$5,000,000
o. of portfolio managers	24
ize of research staff	6

Van Deventer & Hoch is an active equity, passive xed-income, balanced and short-term manager.

It takes a value-oriented approach to equities, in- esting in soundly managed businesses when vailable at a discount to true asset value.

In fixed income, high-grade securities maturing in even years or less are used for defensive pur- oses.

Richard D. Trautwein is chief investment officer; imothy K. McCarthy is client contact.

/an Eck Associates Corp.

22 E. 42nd St., New York, N.Y.
10168; (212) 687-5200

otal assets managed	$1,558,000,000
otal discretionary assets	$1,558,000,000
iscretionary tax-exempt	$213,000,000
nternational equity assets	$76,000,000
ypes of accounts managed	C
ax-exempt clients	1
linimum separate account	$1,000,000
o. of portfolio managers	4
ize of research staff	8

Van Eck Associates Corp. is a global balanced, quity, fixed-income, short-term and gold-related nanager.

Macroeconomic trends determine global equity sset allocation among countries (currencies) and dustries. The firm emphasizes quality, liquidity nd low volatility. In fixed income, macroeconomic nalysis sets interest rate and currency judgments. Government bonds, global diversification and hedg- g strategies are used.

Gold-related serve as a hedge against inflation nd economic adversity.

John C. van Eck is chief investment officer; Robin rni is client contact.

Mutual funds: June 11.

Vanguard Capital

263 Chapalita Drive, Encinitas, Calif.
92024; (619) 436-2456

Total assets managed	$5,000,000
Total discretionary assets	$5,000,000
Discretionary tax-exempt	$5,000,000
International equity assets	$5,000,000
Types of accounts managed	C
Tax-exempt clients	12
Minimum separate account	$100,000
No. of portfolio managers	1

Vanguard Capital is an active domestic and international equity, tactical asset allocation and short-term manager.

It is a market timer/tactical asset allocator, with equity investments emphasizing growth stocks and sector rotation, and fixed-income investments based on sector analysis.

E. James Welsh is chief investment officer and client contact.

The Vanguard Group of Investment Cos.

Vanguard Financial Center, Valley
Forge, Pa. 19482; (215) 648-6000

Total assets managed	$48,576,000,000
Internal, discretionary	$26,676,000,000
Assigned to other firms	$21,900,000,000
Tax-exempt assets	$12,880,000,000
Internal, discretionary	$5,537,000,000
Assigned to other firms	$7,343,000,000
401(k)/457 assets managed	$2,561,000,000
Equity indexed assets	$1,983,000,000
Fixed-income indexed assets	$139,000,000
Types of accounts managed	CEFGU
Minimum separate account	$10,000,000

The Vanguard Group of Investment Cos. is a passive equity, active and passive fixed-income and GIC manager. Active equity, additional active fixed-income, balanced, real estate and international management is handled by external managers.

Vanguard has $48.6 billion in total assets; $26.7 billion is managed internally and $21.9 billion, externally. Of the total, $12.8 billion is tax-exempt; $5.5 billion is managed internally and $7.3, externally. Tax-exempt assets managed by external managers in international equity accounts total $1.331 billion.

Equity approaches offered are passive, quantitative, growth, emerging growth and low p/e. Graham & Dodd analysis is used. Its fixed-income strategies are passive or based on sector analysis.

Real estate investments primarily are in existing, income-producing commercial properties.

John C. Bogle is chief investment officer; James H. Gately is client contact.

Van Kampen Merritt Investment Advisory Corp.

1001 Warrenville Road, Lisle, Ill.
60532; (708) 719-6000

Total assets managed	$25,000,000,000
Total discretionary assets	$8,000,000,000
Discretionary tax-exempt	$350,000,000
Types of accounts managed	CEFGU
Minimum separate account	$5,000,000
No. of portfolio managers	9
Size of research staff	9

Van Kampen Merritt Investment Advisory Corp., an active and passive fixed-income and short-term manager, uses a disciplined, value-added style that limits dependence on interest rate anticipation, emphasizes duration matching, and searches for relative value among sectors and issues. Extensive research enhances management of portfolios of Treasury, mortgage-backed, investment-grade and high-yield, corporate and municipal securities.

Dennis J. McDonnell is chief investment officer; John M. McCareins is client contact.

Vaughan, Nelson, Scarborough & McConnell

6300 Texas Commerce Tower,
Houston, Texas 77002; (713)
224-2545

Total assets managed	$1,000,000,000
Discretionary tax-exempt	$800,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	60
Minimum separate account	$2,000,000
No. of portfolio managers	5

Vaughan, Nelson, Scarborough & McConnell Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach emphasizes a "middle 60%" strategy to downside protection and stable growth using individual issue selection through original primary research, active asset allocation and proprietary valuation analysis. Its fixed-income approach is driven by interest rate anticipation, horizon analysis and sector analysis.

Eugene H. Vaughan Jr. is chief investment officer; Allan J. Waldron is client contact.

Vector Money Management

P.O. Box 3319, Jackson, Miss. 39207;
(601) 969-2106

Total assets managed	$21,000,000
Total discretionary assets	$21,000,000
Discretionary tax-exempt	$19,000,000
Types of accounts managed	CEF
Tax-exempt clients	18
Minimum separate account	$250,000
No. of portfolio managers	2
Size of research staff	2

Vector Money Management Inc. is an active equity, active fixed-income and balanced manager.

Its top-down secular equity approach monitors changing economic, social and political climates to determine the best sectors/industries. Fundamental analysis is then applied to specific companies. In fixed income, it studies economic and political activity to predict inflation and interest rate trends.

Ashby M. Foote III is chief investment officer; R. Mark Fields is client contact.

Vengrowth Capital Fund

145 Wellington St. W., Suite 200,
Toronto, Ontario M5J 1H8; (416)
971-6656

See entry for AMI ASSET MANAGEMENT INTERNATIONAL INC.

Verus Capital

45 Broadway, New York, N.Y. 10006;
(212) 943-9200

Total assets managed	$175,000,000
Total discretionary assets	$175,000,000
Discretionary tax-exempt	$175,000,000
International equity assets	$20,000,000
Types of accounts managed	C
Tax-exempt clients	4
Minimum separate account	$10,000,000
No. of portfolio managers	2
Size of research staff	1

Verus Capital, an active equity manager, looks for 20 to 30 special situations in the United States or abroad with unique fundamentals and attractive risk/reward valuation.

Charles C. Reilly is chief investment officer; Frederic C. Reynolds is client contact.

Virginia Investment Counselors Inc.

1300 Crestar Bank Building, Norfolk,
Va. 23510; (804) 623-2491

Total assets managed	$486,000,000
Total discretionary assets	$475,000,000
Discretionary tax-exempt	$205,000,000
401(k)/457 assets managed	$7,000,000
Equity real estate assets	$5,000,000
Mortgage assets	$5,000,000
International equity assets	$10,000,000
Types of accounts managed	CEFU
Tax-exempt clients	215
Minimum separate account	$250,000
No. of portfolio managers	4
Size of research staff	1

Virginia Investment Counselors Inc. is an active equity, active fixed-income and balanced manager.

Its equity approach seeks low p/e stocks through sector rotation and market timing under Graham & Dodd principles. Its fixed-income approach combines interest rate anticipation and sector analysis. Options are used.

Frederick V. Martin is chief investment officer; Henry V. Harris III is client contact.

W

Waddell & Reed Asset Management Co.

2400 Pershing Road, Kansas City, Mo.
64108; (816) 283-4093

Total assets managed	$972,000,000
Total discretionary assets	$829,000,000
Discretionary tax-exempt	$659,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	27
Minimum separate account	$3,000,000
No. of portfolio managers	11
Size of research staff	21

Waddell & Reed Asset Management Co. is an active equity, active fixed-income, balanced and short-term manager.

Its primary equity approach uses asset allocation oriented to major market cycle changes. The degree of market participation is based on an analysis of price vs. intrinsic value relationships and the business cycle. Its primary fixed-income approach is to alter duration based on the outlook for interest rates within a duration range of one to 6.5 years.

Henry J. Herrmann is chief investment officer; Jackson L. Allen Jr. is client contact.

Wagner & Hamil Inc.

410 17th St., Suite 840, Denver, Colo.
80202; (303) 892-6928

Total assets managed	$33,000,000
Total discretionary assets	$33,000,000
Discretionary tax-exempt	$33,000,000
Types of accounts managed	CF
Tax-exempt clients	9
Minimum separate account	$250,000
No. of portfolio managers	3
Size of research staff	1

Wagner & Hamil Inc., an active equity, passive fixed-income, balanced and short-term cash manager, uses Graham & Dodd analysis with an emphasis on growth stocks.

Judith B. Wagner is chief investment officer; Carolyn Hamil Henderson is client contact.

Computer software and data bases will be highlighted Aug. 6.

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25 largest managers of 401(k)/457 assets

Firm	$ mils.*
Metropolitan Life	9,594
Aetna Life	7,989
John Hancock	7,214
Fidelity Investments	7,007
PRIMCO Capital	6,375
Prudential Investment	5,620
State Street Bank	5,500
G.E. Investment	5,305
Principal Financial	4,957
Massachusetts Mutual	4,800
Chancellor Capital	4,578
Provident Nat'l	4,441
CIGNA Asset	4,000
Morley Capital	4,000
NCNB Nat'l Bank	3,160
Continental Assurance	2,966
Nationwide Life	2,932
Ameritrust	2,657
Bankers Trust	2,643
Vanguard Group	2,561
Certus Financial	2,400
Manufacturers Life	2,400
IDS Trust	2,202
Thompson, Siegel	1,559
T. Rowe Price Guaranteed	1,510
Total	108,370

*Discretionary, tax-exempt assets

Wall Street Associates

7863 Girard Ave., Suite 300, P.O. Box
8589, La Jolla, Calif. 92038; (619)
454-3104

Total assets managed	$340,000,000
Total discretionary assets	$340,000,000
Discretionary tax-exempt	$340,000,000
401(k)/457 assets managed	$26,000,000
Types of accounts managed	CGU
Tax-exempt clients	17
Minimum separate account	$10,000,000
No. of portfolio managers	3

Wall Street Associates, an active equity manager, uses a bottom-up selection process focusing on small-cap companies with strong fundamentals, rapidly accelerating earnings and attractive valuations. The firm concentrates on market inefficiencies.

William Jeffery III, Kenneth F. McCain and Richard S. Coons are chief investment officers; John R. French is client contact.

Warburg Investment Management International

780 Third Ave., New York, N.Y. 10017;
(212) 751-8394

Total assets managed	$2,247,000,000
Total discretionary assets	$2,247,000,000
Discretionary tax-exempt	$1,863,000,000
International equity assets	$1,083,000,000
International fixed income assets	$780,000,000
Types of accounts managed	CEFG
Tax-exempt clients	43
Minimum separate account	$10,000,000
No. of portfolio managers	8

Warburg Investment Management International Ltd. is an active domestic and international equity and fixed-income manager.

Its equity approach focuses on large- and medium-cap growth stocks. It combines top-down and bottom-up fundamental analysis with stocks analyzed against a number of criteria, including earnings growth, management and product strength.

Its fixed-income approach uses interest rate anticipation. The firm makes separate decisions for bond markets and currencies.

R.P.B. Michaelson is chief investment officer; Steven Golann and Mark Reinisch are client contacts.

Warburg, Pincus Counsellors Inc.

466 Lexington Ave., New York, N.Y.
10017; (212) 878-0600

Total assets managed	$4,487,000,000
Total discretionary assets	$3,686,000,000
Discretionary tax-exempt	$1,528,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	150
Minimum separate account	$5,000,000
No. of portfolio managers	14
Size of research staff	9

Warburg, Pincus Counsellors Inc. is an active equity, active fixed-income, balanced, active international equity and short-term manager.

Its equity approach seeks growth and emerging growth stocks based on in-house research; it focuses on financially strong, moderate-size companies with superior earnings prospects.

Its fixed-income approach implements interest rate anticipation strategies, focusing on intermediate maturity securities.

John L. Furth is chief investment officer; Richard H. Klemm is client contact.

Ward & Associates Asset Management

133 Peachtree St., Suite 3910,
Atlanta, Ga. 30303; (404) 524-3900

Total assets managed	$40,000,000
Total discretionary assets	$20,000,000
Discretionary tax-exempt	$20,000,000
Types of accounts managed	C
Tax-exempt clients	1
Minimum separate account	$10,000,000
No. of portfolio managers	1
Size of research staff	1

Ward & Associates Asset Management, an active fixed-income manager, offers passive equity investment using customized "sin-free" indexed portfolios. Its intermediate fixed-income approach is based on sector selection and relative value assessments.

K.R. Holley is chief investment officer and client contact.

Ward & Wissner Capital Management Inc.

99 Park Ave., New York, N.Y. 10016;
(212) 557-2077

Total assets managed	$441,000,000
Total discretionary assets	$441,000,000
Discretionary tax-exempt	$403,000,000
Types of accounts managed	C
Tax-exempt clients	8
Minimum separate account	$10,000,000
No. of portfolio managers	1
Size of research staff	4

Ward & Wissner Capital Management Inc. is an active domestic and international fixed-income and short-term manager.

The firm structures bond portfolios to achieve targeted plan objectives, either nominal or real rates of return and/or minimum return in the appreciation potential.

Leonard H. Wissner is chief investment officer and client contact.

Wardley Investment Services

5 E. 59th St., Suite 700, New York,
N.Y. 10022; (212) 415-0660

Total assets managed	$6,400,000,000
Total discretionary assets	$6,400,000,000
Discretionary tax-exempt	$178,000,000

Wardley Investment Services is the investment management arm of the Hongkong and Shanghai Banking Corp. The firm is a global equity, fixed-income and cash manager, with special expertise in the smaller markets of Southeast Asia. The firm has five offices — Hong Kong; London; Melbourne, Australia; Singapore; and Tokyo — whose assets are included in the above data.

Deborah G. George is client contact for all units.

Wardley Investment Services (Australia) Ltd.

99 William St., Sixth Floor, Melbourne,
VIC 3000, Australia; 03-619-9800

See entry for WARDLEY INVESTMENT SERVICES.

Wardley Investment Services (Hong Kong) Ltd.

Bank of America Tower, 12th Floor, 12
Harcourt Road, Hong Kong;
852-847-9600

See entry for WARDLEY INVESTMENT SERVICES.

Wardley Investment Services International Ltd.

3 Harbour Exchange Square, London,
E14 9GJ, U.K.; 01-955-5050

See entry for WARDLEY INVESTMENT SERVICES.

Wardley Investment Services (Japan) KK

No. 2 Tomoecho Annex, Sixth Floor,
3-8-27 Toranomon, Minato-Ku,
Tokyo 105, Japan; 03-433-4200

See entry for WARDLEY INVESTMENT SERVICES.

Wardley Investment Services Ltd.

Hongkong Bank Building, 21 Collyer
Quay, No. 17-01, Singapore 0104;
65-530-2828

See entry for WARDLEY INVESTMENT SERVICES.

David E. Ware & Associates

2300 N. Barrington Road, Suite 340,
Hoffman Estates, Ill. 60195; (708)
490-9060

Total assets managed	$26,000,000
Total discretionary assets	$22,000,000
Total discretionary tax-exempt	$11,000,000
International fixed-income assets	$2,000,000
Types of accounts managed	CE
Tax-exempt clients	20
Minimum separate account	$200,000
No. of portfolio managers	1
Size of research staff	2

David E. Ware & Associates Inc., an active fixed-income and balanced manager, uses portfolio optimization techniques to establish a level of market risk attributes, and then creates and maintains an optimum portfolio to consistently hold to that risk level. In equities, it uses closed-end funds.

David E. Ware is chief investment officer and client contact.

Wasatch Advisors Inc.

68 S. Main St., Salt Lake City, Utah
84101; (801) 533-0777

Total assets managed	$93,000,000
Total discretionary assets	$93,000,000
Discretionary tax-exempt	$71,000,000
Types of accounts managed	CEF
No. of portfolio managers	3
Size of research staff	4

Wasatch Advisors Inc., an active equity manager, invests in high-quality small companies that are growing rapidly and selling at reasonable value. The firm emphasizes high earnings growth, increasing market share, high return on assets and equity, positive cash flow, quality management and high insider ownership.

Samuel S. Stewart Jr. is chief investment officer; Mark E. Bailey is client contact.

Washington Square Capital

625 Marquette, Minneapolis, Minn.
55402; (612) 342-3736

Total assets managed	$9,119,000,000
Total discretionary assets	$9,119,000,000
Discretionary tax-exempt	$2,777,000,000
Pooled accounts	$7,000,000
Separate accounts	$84,000,000
GICs	$2,127,000,000
Other	$514,000,000
Types of accounts managed	CEFGU
Minimum separate account	$10,000,000
No. of portfolio managers	7
Size of research staff	24

Washington Square Capital is an active domestic and international fixed-income and short-term manager and a GIC provider.

Fixed-income management is offered through its subsidiary, Washington Square Advisors. Equity management is offered through a partnership with Hahn, Holland and Grossman.

Russell Swansen is chief investment officer; Stephen Dillenburg and Mindy Paul are client contacts.

Webster Management Corp.

20 Exchange Place, New York, N.Y.
10005; (212) 510-5352

Total assets managed	$6,358,000,000
Total discretionary assets	$6,358,000,000
Total discretionary tax-exempt	$540,000,000
401(k)/457 assets managed	$75,000,000
International fixed-income assets	$11,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	62
Minimum separate account	$5,000,000
No. of portfolio managers	17
Size of research staff	35

Webster Management Corp. is an active equity, active domestic and international fixed-income, balanced, tactical asset allocation, short-term and options overwriting manager.

Fundamental equity emphasizes sector rotation based on investment themes; stock selection focuses on relative value. The fundamental fixed-income approach focuses on shifting maturities based on interest rate forecasting.

Quantitative strategies includes tactical asset allocation using a proprietary dividend discount model, specialized fixed-income investing and financial futures and options.

James D. Taliaferro is chief investment officer and client contact.

WEDGE Capital Management

2920 One First Union Center,
Charlotte, N.C. 28202-6002; (704)
334-6475

Total assets managed	$1,140,000,000
Total discretionary assets	$1,140,000,000
Discretionary tax-exempt	$930,000,000
401(k)/457 assets managed	$50,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	143
Minimum separate account	$10,000,000
No. of portfolio managers	4
Size of research staff	2

WEDGE Capital Management is an active equity, active fixed-income and balanced manager.

Its equity approach uses quantitative disciplines to evaluate a broad universe. Desired stocks will have improving earnings, good dividends and low p/e ratios. Its fixed-income approach uses quantitative disciplines to anticipate interest rate changes.

Richard X. Hodde is chief investment officer; R. Michael James is client contact.

Wedgewood Capital Management

901 15th St. N.W., Suite 220,
Washington D.C. 20005; (202)
408-1550

Total assets managed	$28,000,000
Total discretionary assets	$28,000,000
Discretionary tax-exempt	$28,000,000
Types of accounts managed	CG
Tax-exempt clients	3
Minimum separate account	$5,000,000
No. of portfolio managers	1
Size of research staff	1

Wedgewood Capital Management, an active fixed-income manager, concentrates on duration and sector weighting.

It makes appropriate duration shifts in response to real economic changes and overweight, undervalued sectors.

Daryl C. Dennis is chief investment officer; Myra Evans-Lapeyrolene is client contact.

Weiss Peck & Greer

1 New York Plaza, New York, N.Y.
10004; (212) 908-9500

Total assets managed	$6,123,000,000
Total discretionary assets	$6,123,000,000
Discretionary tax-exempt	$3,831,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	101
Minimum separate account	$5,000,000
No. of portfolio managers	16
Size of research staff	7

Weiss Peck & Greer is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is flexible, characterized by a combination of top-down and bottom-up processes, over-weighting particularly attractive sectors. In stock selection, the firm is value-driven, seeking companies with consistent earnings growth or with prospects of fundamental change in structure or regulation in its industry.

Its fixed-income approach stresses high-quality portfolios and a methodology that is neither indexation nor market timing. Management is systematic and based on holding a constant level of portfolio risk (duration), wherein market volatility makes a positive contribution to returns. Individual securities are value-ranked based on proprietary models.

Stephen H. Weiss is chief investment officer; Vincent E. Teti is client contact.

Wellington Management Co.

75 State St., Boston, Mass. 02109;
(617) 951-5000

Total assets managed	$38,127,000,000
Total discretionary assets	$38,127,000,000
Discretionary tax-exempt	$10,974,000,000
Mortgage assets	$105,000,000
International equity assets	$349,000,000
International fixed-income assets	$46,000,000
International cash assets	$14,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	211
No. of portfolio managers	31
Size of research staff	45

Wellington Management Co. is an active equity, active fixed-income, balanced, real estate, active international equity and fixed-income, and short-term manager.

The firm offers a range of domestic and international equity and fixed-income styles, with investment decisions based on intensive fundamental research.

For real estate, the firm invests in participating mortgages in established high-quality residential multifamily properties.

Robert W. Doran is chief investment officer; Dena G. Wilmore is client contact.

Wells Fargo Investment Advisors

45 Fremont St., San Francisco, Calif.
94105; (415) 597-2700

Total assets managed	$80,795,000,000
Total discretionary assets	$80,795,000,000
Discretionary tax-exempt	$78,630,000,000
International equity assets	$4,687,000,000
International fixed-income assets	$84,000,000
Equity indexed assets	$58,787,000,000
Fixed-income indexed assets	$7,180,000,000
Dedicated/immunized assets	$270,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	327
Minimum separate account	$100,000,000
No. of portfolio managers	19
Size of research staff	2

Wells Fargo Investment Advisors is a passive equity, passive fixed-income, tactical asset allocation, passive international/global equity and fixed-income, short-term, passive country funds and active country weights manager.

Its equity approach uses tactical asset allocation and quantitative techniques. The firm's goal is to provide highly controlled investment outcomes at the lowest cost.

In fixed income, the firm offers five mutually exclusive and exhaustive modular bond index funds, each of which tracks a specific segment of the universe of investment-grade bonds. Modular funds can be held in any weights, including market capitalization weights, to capture the returns of broad market indices.

Patricia C. Dunn and Jeffrey Skelton are chief investment officers; Michael J. Henman is client contact.

Wells Fargo Realty Advisors

595 Market St., 15th Floor, San
Francisco, Calif. 94105-2824; (415)
477-5800

Total assets managed	$3,200,000,000
Total discretionary assets	$2,957,000,000
Discretionary tax-exempt	$439,000,000
401(k)/457 assets managed	$50,000,000
Equity real estate	$436,000,000
Mortgage assets	$3,000,000
Types of accounts managed	CG
Tax-exempt clients	150
Minimum separate account	$100,000,000
No. of portfolio managers	2

Wells Fargo Realty Advisors, a real estate manager, seeks opportunities to create value through new property development and the expansion or renovation of existing properties.

Doug Hayek is chief investment officer; J. Michael Johnson is client contact.

Wentworth, Hauser & Violich

333 Sacramento St., San Francisco,
Calif. 94111; (415) 981-6911

Total assets managed	$1,944,000,000
Total discretionary assets	$1,944,000,000
Discretionary tax-exempt	$1,644,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	119
Minimum separate account	$1,000,000
No. of portfolio managers	7
Size of research staff	3

Wentworth, Hauser & Violich is an active equity, active fixed-income, balanced and short-term cash manager.

Equity portfolio characteristics are p/es less than the S&P p/e, 10-year dividend growth rates double the S&P and implied returns (yield plus plow back) 30% greater than the S&P.

Its fixed-income approach structures portfolios to take advantage of cyclical behavior of interest rates. Average maturity is less than five years.

Wm. K. Hauser is chief investment officer; Bradford Hall is client contact.

Wertheim Schroder Investment Services Inc.

787 Seventh Ave., Equitable Center,
New York, N.Y. 10019; (212)
492-6000

Total assets managed	$10,450,000,000
Total discretionary assets	$980,000,000
Total discretionary tax-exempt	$818,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	28
Minimum separate account	$5,000,000
No. of portfolio managers	9
Size of research staff	26

Wertheim Schroder Investment Services Inc. is an active equity, active fixed-income, balanced and short-term manager.

In equities, the decision-making emphasis is on fundamental research, seeking high-quality stocks selling at low relative price multiples with unrecognized future growth potential. In fixed-income, total return is emphasized, using high-quality securities; primary focus is on best relative values in the market sectors. The firm has expertise in mortgage-backed securities.

E. William Smethurst Jr. is chief investment officer; Gary S. Klem is client contact.

West One Trust-West One Bank, Idaho

101 S. Capitol Blvd., Suite 905, Boise,
Idaho 83702; (208) 383-7252

Total assets managed	$1,384,000,000
Total discretionary assets	$1,000,000,000
Discretionary tax-exempt	$558,000,000
Pooled accounts	$17,000,000
Separate accounts	$541,000,000
401(k)/457 assets managed	$55,000,000
Fixed-income indexed assets	$1,000,000
Tax-exempt clients:	
Commingled	223
Separate	98
Types of accounts managed	CEFGU
Minimum separate account	$1,000,000
No. of portfolio managers	7
Size of research staff	2

West One Trust-West One Bank, Idaho is an active and passive equity, active fixed-income, balanced and short-term manager.

Its equity approach uses a value orientation toward stock selection that originates with a top-down economic overview. It prefers companies with low financial leverage, expanding earnings, below-market p/e and low price/book. Its fixed-income approach uses interest rate trends and forecasts generated from a fundamental view to set portfolio durations. Sector analysis is used to identify vehicles and add incremental returns.

Richard Vycital is chief investment officer; John Hart is client contact.

Western Asset Management

117 E. Colorado Blvd. Pasadena,
Calif. 91105; (818) 584-4300

Total assets managed	$6,772,000,000
Total discretionary assets	$6,772,000,000
Discretionary tax-exempt	$5,568,000,000
401(k)/457 assets managed	$199,000,000
Fixed-income indexed assets	$33,000,000
Dedicated/immunized assets	$88,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	46
Minimum separate account	$50,000,000
No. of portfolio managers	7
Size of research staff	2

Western Asset Management Co. is an active and passive fixed-income, short-term and structured manager.

Its primary investment approach uses interest rate anticipation and sector analysis. Value is added primarily by sector rotation (both among and within sectors) and by issue selection. Risk is controlled by carefully and explicitly controlling portfolio interest rate exposure.

W. Curtis Livingston is chief investment officer; Randolph L. Kohn is client contact.

Western Reserve Capital Management Inc.

2001 Ross Ave., 44th Floor, Dallas,
Texas 75265; (214) 979-7770

Total assets managed	$388,000,000
Total discretionary assets	$388,000,000
Discretionary tax-exempt	$388,000,000
International equity assets	$91,000,000
Types of accounts managed	C
Tax-exempt clients	1
No. of portfolio managers	4
Size of research staff	1

Western Reserve Capital Management Inc. is an active domestic and international equity, short-term and venture capital manager.

It combines top-down and bottom-up approaches, focusing on emerging growth and growth companies.

Thomas Tull is chief investment officer and client contact.

Westwood Management

885 Third Ave., New York, N.Y.
10022-4802; (212) 688-2323

Total assets managed	$1,005,000,000
Total discretionary assets	$1,005,000,000
Discretionary tax-exempt	$950,000,000
401(k)/457 assets managed	$10,000,000
Types of accounts managed	CEFG
Tax-exempt clients	29
Minimum separate account	$25,000,000
No. of portfolio managers	3
Size of research staff	1

Westwood Management Corp. is an active and passive equity and balanced manager.

The firm is a top-down, active asset allocator using cash, bonds, options and stock index futures in addition to stocks. The firm emphasizes principal preservation in down markets and selects stocks through a process geared to identifying earnings surprises.

Susan M. Byrne is chief investment officer; David W. Jennings is client contact.

WFG Investment Management Inc.

1400 Eye St. N.W., Washington, D.C.
20005; (202) 842-4620

Total assets managed	$26,000,000
Total discretionary assets	$20,000,000
Discretionary tax-exempt	$16,000,000
Equity real estate	$9,000,000
Types of accounts managed	CF
Tax-exempt clients	8
Minimum separate account	$500,000
No. of portfolio managers	2
Size of research staff	1

WFG Investment Management Inc. is an active equity, active fixed-income, balanced and short-term manager.

Its equity approach is value-oriented; its fixed-income approach employs interest rate anticipation.

Carol Greenwald is chief investment officer and client contact.

Wilkens & Nanovic Associates

35 Mason St., Greenwich, Conn,
06830; (203) 622-1040

Total assets managed	$390,000,000
Discretionary tax-exempt	$390,000,000
Types of accounts managed	C
Tax-exempt clients	2
Minimum separate account	$15,000,000
No. of portfolio managers	2

Wilkens & Nanovic Associates is an active, risk-averse, core equity manager focusing on identifying fundamental changes within companies whose stocks at purchase exhibit limited downside risk. Portfolios are diversified; cash reserves may reach 50%.

Frank Wilkens is chief investment officer and client contact.

Wilkinson Boyd Asset Management

199 Elm St., New Canaan, Conn.
06840; (203) 972-0039

Total assets managed	$60,000,000
Total discretionary assets	$60,000,000
Discretionary tax-exempt	$40,000,000
Types of accounts managed	F
Tax-exempt clients	1
Minimum separate account	$5,000,000
No. of portfolio managers	2
Size of research staff	11

Wilkinson Boyd Asset Management is an active fixed-income and short-term manager.

The firm uses interest rate anticipation, sector analysis and business cycle analysis. It offers an enhanced limited duration portfolio of U.S. Treasury securities. It is committed to preservation of principal and management of exposure to price volatility.

Frank M. Wilkinson is chief investment officer; Dennis J. Cunningham is client contact.

Willoughby Holin & Rentner

7455 N.W. Fourth St., Plantation, Fla.
33318; (305) 584-8800

Total assets managed	$178,000,000
Total discretionary assets	$178,000,000
Discretionary tax-exempt	$143,000,000
Types of accounts managed	CFU
Tax-exempt clients	162
Minimum separate account	$250,000
No. of portfolio managers	3

Willoughby Holin & Rentner Inc. is an active and passive equity, passive fixed-income and balanced manager.

Its equity approach uses growth and emerging growth stocks, trying to identify trends, then buying stocks likely to benefit from those trends when the securities are depressed. Its fixed-income approach uses interest rate anticipation.

Michael A. Harris is chief investment officer; James D. Rentner is client contact.

Wilmington Capital Management Inc.

1 Rodney Square, Suite 100,
Wilmington, Del. 19801; (302)
656-8244

Total assets managed	$1,378,000,000
Total discretionary assets	$1,284,000,000
Discretionary tax-exempt	$1,284,000,000
401(k)/457 assets managed	$149,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	23
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	3

Wilmington Capital Management Inc., an active equity and balanced manager, combines Graham & Dodd analysis and low p/e stocks. It seeks to determine value through fundamental analysis; disparities between value and price create investment opportunities.

Fixed income is used in balanced accounts for increased cash flow, reduced market volatility and to protect against business risk.

Daniel F. Mahoney Jr. is chief investment officer; James W. MacAllen is client contact.

Wilmington Trust Co.

Rodney Square North, Wilmington,
Del. 19890; (302) 651-8518

Total assets managed	$105,551,000,000
Total discretionary assets	$4,835,000,000
Discretionary tax-exempt	$1,134,000,000
Pooled accounts	$69,000,000
Separate accounts	$1,065,000,000
401(k)/457 assets managed	$10,000,000
Tax-exempt clients:	
Commingled	45
Separate	117
Types of accounts managed	CEFGU
Minimum separate account	$5,000,000
No. of portfolio managers	10
Size of research staff	8

Wilmington Trust Co. is an active domestic and international equity, active fixed-income, balanced and short-term manager.

Its equity approach is disciplined, systematic, consistent and value-oriented, using low p/e stocks and Graham & Dodd analysis. It offers three approaches: quantitative equity, select value and optioned equity.

In fixed income, it uses a mathematical investment process that reacts to and participates in price trends.

Peter Succoso is chief investment officer; Jeffrey Stroble is client contact.

Wilshire Asset Management

1299 Ocean Ave., Santa Monica, Calif.
90401; (213) 451-3051

Total assets managed	$3,795,000,000
Total discretionary assets	$2,893,000,000
Discretionary tax-exempt	$2,893,000,000
Equity indexed assets	$2,893,000,000
Types of accounts managed	CG
Tax-exempt clients	11
Minimum separate account	$5,000,000

Wilshire Asset Management, a passive equity manager, manages index portfolios and style portfolios focusing on growth, emerging growth, and value using quantitative models.

Thomas D. Stevens is chief investment officer; Robert A. Garvy is client contact.

Wilson Foster & Co. Inc.

4987 Olivas Park Drive, Suite 100,
Ventura, Calif. 93003; (805)
644-8207

Total assets managed	$92,000,000
Total discretionary assets	$92,000,000
Discretionary tax-exempt	$90,000,000
Types of accounts managed	C
Tax-exempt clients	6
Minimum separate account	$500,000
No. of portfolio managers	1
Size of research staff	1

Wilson Foster & Co. Inc. is an active equity, balanced and tactical asset allocation manager.

The firm screens for successful companies, defined as a function of size and/or profitability. Asset allocation is based on economic forecasting. Risk management divides the asset allocation into real assets, bonds, stocks and cash equivalents.

In fixed income, the firm uses interest rate anticipation through fundamental economic analysis as well as credit analysis.

Harvey F. Wilson is chief investment officer and client contact.

Wilson, Kemp & Associates

400 Renaissance Center, Detroit,
Mich. 48243; (313) 259-6210

Total assets managed	$400,000,000
Total discretionary assets	$400,000,000
Discretionary tax-exempt	$260,000,000
Types of accounts managed	CFG
Tax-exempt clients	80
Minimum separate account	$300,000
No. of portfolio managers	2
Size of research staff	1

Wilson, Kemp & Associates is an active equity, active and passive fixed-income and balanced manager.

Its equity approach employs fundamental analysis combining growth, emerging growth and low p/e stocks with Graham & Dodd analysis.

Its primary fixed-income approach is interest rate anticipation with an emphasis on high-quality corporate and government sector issues.

Thomas A. Wilson and Robert D. Kemp Jr. are chief investment officers; Mark E. Van Faussien is client contact.

Windham Capital Management

79 Madison Ave., New York, N.Y.
10016; (212) 889-1056

Total assets managed	$416,000,000
Total discretionary assets	$416,000,000
Discretionary tax-exempt	$416,000,000
Types of accounts managed	CF
Tax-exempt clients	3
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	3

Windham Capital Management is an active equity, tactical asset allocation, short-term and currency manager.

Its stock elimination equity approach blends quantitative and traditional investment techniques in seeking superior performance. Fixed-income is used in tactical asset allocation.

Neil M. McCarthy is chief investment officer and client contact.

Windsor Financial Group

8400 Normandale Lake Blvd., Suite
1450, Minneapolis, Minn. 55437;
(612) 835-2220

Total assets managed	$1,252,000,000
Total discretionary assets	$259,000,000
Discretionary tax-exempt	$103,000,000
401(k)/457 assets managed	$3,000,000
Types of accounts managed	CF
Tax-exempt clients	38
Minimum separate account	$1,000,000
No. of portfolio managers	5

Windsor Financial Group is an active equity, passive fixed-income, balanced and short-term manager.

Its value-oriented equity approach emphasizes strong balance sheets; bottom-up stock selection uses medium-cap issues. In fixed income, it uses sector analysis to achieve targeted returns with top-down investment risk management strategies.

Tyron Estlick is chief investment officer; Frank Hermann is client contact.

Windsor Realty Advisors

120 W. Grand, Escondido, Calif.
92025; (619) 747-1188

Total assets managed	$150,000,000
Total discretionary assets	$150,000,000
Discretionary tax-exempt	$101,000,000
Equity real estate	$101,000,000
Types of accounts managed	CG
Minimum separate account	$10,000,000

Windsor Realty Advisors, a real estate manager, seeks to acquire high-grade mobile home communities on an all-cash basis and to add value to these properties and generate strong cash flow.

Christopher J. Coseo is chief investment officer.

Winrich Capital Management

23702 Birtcher Drive, Lake Forest,
Calif. 92630; (714) 380-0200

Total assets managed	$250,000,000
Total discretionary assets	$250,000,000
Discretionary tax-exempt	$156,000,000
401(k)/457 assets managed	$1,000,000
International equity assets	$9,000,000
International fixed-income assets	$12,000,000
International cash assets	$4,000,000
Types of accounts managed	CF
Tax-exempt clients	39
Minimum separate account	$1,000,000
No. of portfolio managers	6
Size of research staff	2

Winrich Capital Management Inc. is an equity-oriented balanced manager offering active balanced, active equity, active fixed-income and active short-term management.

Its equity approach is value oriented, using systematic, computer-aided application of objective criteria coupled with daily monitoring.

Its fixed-income approach emphasizes high quality and low volatility. U.S. government and corporate (domestic and international) securities are used in a conservative, laddered-maturity technique.

Darrell J. Winrich is chief investment officer; Paul R. Black is client contact.

William D. Witter Inc.

153 E. 53rd St., New York, N.Y.
10022; (212) 753-7878

Total assets managed	$310,000,000
Total discretionary assets	$310,000,000
Discretionary tax-exempt	$179,000,000
Types of accounts managed	CEF
Tax-exempt clients	31
Minimum separate account	$5,000,000
No. of portfolio managers	5
Size of research staff	2

William D. Witter Inc. is an active equity and fixed-income, and balanced manager.

The equity philosophy emphasizes growth with a value discipline. Portfolios are constructed on a bottom-up, risk/reward basis, seeking a better than market investment return. Small-cap, low p/e and growth stocks are targeted.

William D. Witter is chief investment officer and client contact.

Wolf, Webb, Burk & Campbell Inc.

260 S. Broad St., Suite 901,
Philadelphia, Pa. 19102; (215)
735-5910

Total assets managed	$1,278,000,000
Total discretionary assets	$1,278,000,000
Discretionary tax-exempt	$1,278,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	53
Minimum separate account	$10,000,000
No. of portfolio managers	7

Wolf, Webb, Burk & Campbell Inc. is an active equity, active fixed-income and balanced manager.

Equity investments are based on the firm's value-oriented, sector rotational, market-timing approach. Its fixed-income approach is keyed to interest rate anticipation, market timing and sector swaps.

H. Jerry Wolf is chief investment officer; William J. Campbell is client contact.

Wood, Struthers & Winthrop Management Corp.

140 Broadway, New York, N.Y. 10005;
(212) 504-4000

Total assets managed	$1,144,000,000
Total discretionary assets	$874,000,000
Discretionary tax-exempt	$356,000,000
401(k)/457 assets managed	$56,000,000
Types of accounts managed	CEF
Tax-exempt clients	75
Minimum separate account	$250,000
No. of portfolio managers	6
Size of research staff	3

Wood, Struthers & Winthrop Management Corp. is an active equity, active fixed-income and balanced manager.

Its equity approach is based on fundamental research screened within the context of quantitative valuation techniques. Holdings are concentrated by sectors, emphasizing industry leaders with an identifiable earnings growth pattern. In fixed-income, it focuses on maturity risk to ensure preservation of capital and a real rate of return over an interest rate cycle. Fundamental research is used.

James Engle is chief investment officer; Carl Menges is client contact.

Woodmont Realty Advisors

1050 Ralston Ave., Belmont, Calif.
94002; (415) 592-3960

Total assets managed	$500,000,000
Total discretionary assets	$400,000,000
Discretionary tax-exempt	$200,000,000
Equity real estate	$200,000,000
Types of accounts managed	FG
Tax-exempt clients	3
Minimum separate account	$10,000,000

Woodmont Realty Advisors Inc., a real estate adviser, provides acquisition, disposition and asset management, concentrating on West Coast fully leased office, industrial, R&D, warehouse and apartment properties.

Howard Friedman is chief investment officer and client contact.

WorldInvest Ltd.

56 Russell Square, London WC1B
4HP U.K.; 01-637-3322

Total assets managed	$3,104,000,000
Total discretionary assets	$3,104,000,000
Discretionary tax-exempt	$1,812,000,000
International equity assets	$477,000,000
International fixed income	$1,313,000,000
International cash assets	$22,000,000
Types of accounts managed	CEFG
Tax-exempt clients	49
Minimum separate account	$10,000,000
No. of portfolio managers	14
Size of research staff	5

WorldInvest Ltd. is an active international/global equity, fixed-income and short-term manager.

WorldInvest's approach is driven by fundamental economic analysis. The firm is willing to take significant positions away from the indexes, based on its top-down view of anticipated market returns. The firm believes economic trends and developments are key forces driving returns from stock, bond and currency markets.

Keith Brown is chief investment officer; Susan Leader is client contact in New York at (212) 755-0900.

Wright Investors' Service

10 Middle St., Bridgeport, Conn.
06604; (203) 333-6666

Total assets managed	$3,575,000,000
Total discretionary assets	$3,575,000,000
Discretionary tax-exempt	$3,319,000,000
International equity assets	$14,000,000
Dedicated/immunized assets	$782,000,000
Types of accounts managed	CEFGU
Tax-exempt clients	106
Minimum separate equity account	$5,000,000
Minimum separate bond account	$2,000,000
No. of portfolio managers	7
Size of research staff	67

Wright Investors' Service is an active and passive domestic and international equity, active fixed-income, balanced, tactical asset allocation, short-term and dedicated bond manager.

Its equity styles include small- and large-cap fiduciary index; large-cap core; value-growth; small cap; quality international; and international country-specific indexes. Its fixed-income styles include money market, short-term bond and total return.

Judith R. Corchard is chief investment officer; Albert L. Meric Jr. is client contact.

Y

Yamaichi Capital Management Inc.

2 World Trade Center, Suite 9828,
New York, N.Y. 10048; (212)
432-6800

See entry for YAMAICHI INTERNATIONAL CAPITAL MANAGEMENT CO. LTD.

Yamaichi International Capital Management Co.

1-14-8, Ningyo-cho, Nihonbashi,
Chuo-ku, Tokyo 103, Japan;
03-660-6143

Total assets managed	$11,819,000,000
Total discretionary assets	$4,006,000,000
Discretionary tax-exempt	$60,000,000
International equity assets	$59,000,000
Types of accounts managed	C
Tax-exempt clients	3
Minimum separate account	$5,000,000
No. of portfolio managers	40
Size of research staff	15

Yamaichi International Capital Management Co. Ltd. is an international/global active equity manager.

Its quantitative approach is an MPT-driven product; its value-oriented approach employs a favorable risk/reward evaluation to maximize return and minimize risk.

Its primary fixed-income approach analyzes economic and monetary trends to identify optimal maturity selection.

Ichiro Sasaki is chief investment officer; Toshiyuki Kanaya is client contact in New York at (212) 466-6814.

The Yarmouth Group

527 Madison Ave., New York, N.Y.
10022; (212) 355-4810

Total assets managed	$5,850,000,000
Total discretionary assets	$1,650,000,000
Discretionary tax-exempt	$1,650,000,000
Equity real estate	$1,650,000,000
Types of accounts managed	CFGU
Tax-exempt clients	15
Minimum separate account	$100,000,000
No. of portfolio managers	12
Size of research staff	8

The Yarmouth Group, formerly Richard Ellis Inc., is a real estate manager.

The firm stresses investments in fundamentally strong office buildings, regional malls and modern industrial properties. Generally, properties are in markets with substantial economic growth.

Christopher D. Budden is chief investment officer; David R. Hodes is client contact.

Yasuda Bank & Trust (U.S.A.)

1 World Trade Center, Suite 8833,
New York, N.Y. 10048; (212)
432-3620

Total assets managed	$31,000,000
Total discretionary assets	$28,000,000
Discretionary tax-exempt	$28,000,000
Separate accounts	$28,000,000
401(k)/457 assets managed	$3,000,000
Tax-exempt clients	2
Types of accounts managed	C
No. of portfolio managers	2
Size of research staff	4

Yasuda Bank & Trust (U.S.A.) is an active equity, active fixed-income and short-term manager.

Its value-oriented equity style is enhanced by quantitative (MPT) optimization and Graham & Dodd analysis. Its fixed-income approach uses interest rate-based projections.

Marc B. Ira is chief investment officer; W. Franklin Clemmons II is client contact.

Yeager, Wood & Marshall

630 Fifth Ave., New York, N.Y. 10111;
(212) 765-5350

Total assets managed	$500,000,000
Total discretionary assets	$500,000,000
Discretionary tax-exempt	$400,000,000
Types of accounts managed	CEF
Tax-exempt clients	15
Minimum separate account	$10,000,000
No. of portfolio managers	4

Yeager, Wood & Marshall Inc., an active equity manager, invests solely in growth company stocks. Portfolio companies dominate their relevant markets and enjoy recurring revenue, thus ensuring sustainability of superior growth rates.

B. Robert Wood is chief investment officer; George M. Yeager is client contact.

Yield Management Group

20 Toronto St., Suite 1140, Toronto,
Ontario M5C 2B8; (416) 364-3711

Total assets managed	$1,200,000,000
Discretionary tax-exempt	$600,000,000
For subsidiaries of U.S. firms	$100,000,000
Dedicated/immunized assets	$100,000,000
Tax-exempt clients	55
U.S. subsidiaries	5
Types of accounts managed	CGU
Minimum separate account	$5,000,000
No. of portfolio managers	3
Size of research staff	5

Yield Management Group, a Canadian firm, is an active and passive equity, passive fixed-income, tactical asset allocation and short-term manager.

Its equity approach screens stocks for specific historic characteristics — low price-to-book, high return on equity. Graham & Dodd analysis and an optimization model also are used.

Its fixed-income approach ranges from immunization to return optimization under various interest rate scenarios. Sector analysis is used.

Eric Innes is chief investment officer and client contact.

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May 28, 1990

P &Investments

The Newspaper of Corporate and Institutional Investing

$8 An Issue / $127 A Year

AT DEADLINE

ESOP bill aids defense firms

Sen. Dan Coats, R-Ind., ntroduced a bill that would rovide special tax benefits for efense companies that set up SOPs. It's intended to help efense contractors diversify their usinesses, given the shrinking ilitary budget.

The bill would give lenders a 00% tax deduction on interest on oans to defense contractors that ell at least 30% of their stock to SOPs and a 10-year deferral of ax on sales of employer securities o an ESOP.

Fund severs consultant ties

The $770 million Milwaukee County Employees Retirement ystem has decided to end its 4-year relationship with rudential-Bache Securities Inc.

Pru-Bache's Milwaukee office ad come under fire last year for lleged improper conduct as the und's consultant, and board embers voted to search for a eplacement.

Finalists are William M. Mercer nc., Deerfield, Ill., and the hicago offices of SEI Corp. and allan Associates Inc.

osters realigned

Federal Express Corp. hired he Vanguard Group as manager nd trustee for $265 million in efined contribution assets eginning June 1. . . . The $6.6 illion Commonwealth of assachusetts Teachers' and mployees' Pension Fund hired ombard Odier Investment anagement, London, to run $50 illion in European equities. . . . he $3.54 billion Atlantic ichfield Co. pension fund hired ridgewater Asset Management o. for a $25 million currency anagement account. . . . The 4.5 billion Harvard University ndowment fund hired Crescent apital Inc. to manage $15 illion in an enhanced S&P 500 ndex fund. . . . The $4 billion tah State Retirement System ired The Northern Trust Co. as ts first master custodian.

AA joint venture formed

First Quadrant Corp. formed a oint venture with Nomura nvestment Management Co. to ffer global tactical asset llocation products to Nomura's lients.

According to Robert Arnott, hief investment officer of First uadrant, this will be the first lobal tactical asset allocation roduct to be offered in Japan.

iley goes to Loomis, Sayles

Robert Riley, formerly xecutive vice president of The rudential Investment Corp. and hairman of The Prudential ealty Group, has been named resident and chief executive fficer of Loomis, Sayles & Co. nc. effective June 1.

Mr. Riley replaces Robert emp, who was named managing artner of Capital Growth anagement, another affiliate of oomis' parent, The New ngland.

Calamos Asset Management's Nick Calamos, standing, and John Calamos ask clients for the flexibility to invest in both domestic and foreign convertible securities.

Riding the market

Funds filling up on foreign convertibles

By Curtis Vosti

Some pension funds — whether they know it or not — are increasing their investments in international convertible securities.

As the worldwide convertible market has grown to more than $200 billion — about four times the size of the U.S. convertible market — pension funds of General Electric Co. and New York Life Insurance Co. deliberately have expanded overseas from their familiarity with the U.S. convertible market.

Other pension funds hold international convertibles because they have given their domestic managers discretion to tap foreign markets. Among the managers investing internationally are Froley, Revy Investment Co.; Calamos Asset Management Inc.; and MacKay-Shields Financial Corp.

"Simple story," said John Reinsberg, senior vice president for G.E. Investments, Stamford, Conn., which manages the $29 billion G.E. pension fund. G.E. uses international convertibles, he said, because of the yield advantages, and the same upside potential and downside protection as domestic convertibles.

"It's a natural for the person already investing internationally," said Steve Puckowitz, an associate with the global derivatives desk at UBS Securities Inc., New York. Mr. Puckowitz has been studying international convert-

See **Foreign** *on page 37*

Investors reveal real estate tactics

By Steve Hemmerick

NEW YORK — Ameritech's pension fund increased its allocation to real estate, while AT&T might do so if good investing opportunities are found.

IBM pension officials, meanwhile, are studying whether to stay in, get out or expand. At RJR Nabisco, decisions on the size of its real estate portfolio have been put on hold.

Officials at these and other other pension funds are grappling with the best real estate strategy to pursue, be it international, indexing, securitization or some combination of approaches.

Executives of the four funds discussed their strategies during a New York University conference on pension fund investing in real estate held earlier this month.

L.B. "Tom" Thompson, director of real estate investments for the $14.3 billion American Information Technologies Corp. fund, said Ameritech recently raised its real estate allocation to 20% of assets from 15%.

In an interview, however, he said he would be "shocked" if the Chicago-based fund reached that target in the current real estate market.

He said the fund will invest, when practical, in European real estate. In addition, Ameritech executives will be looking for special opportunities as a result of a "retrenchment" of interest in real estate by domestic pension funds and foreign investors.

Joseph Russo, division manager of real estate investments at the $32.7 billion pension fund of American Telephone & Telegraph Co., New York, also expects a retrenchment.

AT&T has $3.8 billion, or about 12% of its pension assets, in real estate. Mr. Russo said the fund might increase its allocation to 15% of assets during the next three to five years.

In the meantime, he said, AT&T is going to continue to improve or renovate some of its existing properties, finance and refinance some of them and restructure troubled properties.

Although real estate returns have been declining, AT&T's real estate investments have exceeded major real estate benchmarks and inflation and have tied with bond returns.

In the past five years, Mr. Russo said, AT&T's pension fund has cut its office investments to 40% of real estate assets from 50% while more than doubling the amount in retail, raising it to 49% from 22%.

James Peterson, director of real estate and alternative investments for IBM Corp., Stamford, Conn., said his company is preparing a critical study on the future of its real estate investments. IBM's $22 billion pension fund has about $2.5 billion in real estate.

Although consultants long have held real estate is a necessary diversification tool, Mr. Peterson said IBM executives believe the focus needs to be on financial returns, not "academic" theories about diversification.

Ameritech's Mr. Thompson, however, still holds to the traditional reasons for investing in real estate, including its use as an inflation hedge and reducing the risk level of investment portfolios through diversification.

But, he said, "The fact is we can't find opportunities to fit the rationales." Real estate no longer is a "slam dunk" investment, so pension executives must temper their need for it with practical

See **Tactics** *on page 34*

Buybacks driving high-yield market

By Marlene Givant Star

Bond buybacks by high-yield issuers are surging, providing a much needed catalyst for prices in a depressed junk market.

At least 23 companies are undertaking buybacks to reduce their outstanding debt, including Coltec Industries Inc., Burlington Industries Inc. and Wickes Cos. Inc.

Figures on bond buybacks are hard to come by because companies don't usually announce them publicly or with the fanfare that accompanies stock buybacks. Most companies make informal arrangements with their brokers. Or, more recently, they'll call their largest bondholders — mainly institutional investors — directly, practices some investors consider unfair.

Institutional investors are becoming much more aware of buyback activity because of the increase in direct solicitations from companies and cases of companies coming forward to purchase their own bonds when a seller can't find demand elsewhere.

"Investors are more aware of it. It was a well-kept secret (among brokers) up till six months ago," said John Sellers, vice president at Salomon Brothers Inc. Salomon has executed about $3 billion in

See **Buybacks** *on page 35*

Coltec Industries, formerly Colt Industries and operator of this truck parts division, has repurchased $92 million of its 12.5% senior subordinated debentures.

NEWS DIGEST

Equity managers, shaken by what they saw as trouble signs early in the year, raised cash reserves to 7% in the first quarter. Page 31

Non-discrimination rules proposed by the Internal Revenue Service could push up funding costs for pension plans, experts say. Page 34

Tobacco industry stock divestitures by two university endowments could prompt other institutional investors to do the same. Page 35

Virginia Gov. L. Douglas Wilder wants state pension and educational endowment funds to divest their South Africa-related securities. Page 38

SPECIAL REPORT: GICS

The dangers of junk bond damage to guaranteed investment contracts is overblown, experts say. Page 17

Controversy continues to rage on how much GIC managers really contribute to overall returns. Page 17

FINANCING

Bond buybacks by high-yield issuers are surging, providing a much needed catalyst for prices in a depressed junk market. Page 1

Japanese banks are altering their lending practices following big changes in the Japanese economy, forcing local companies to find other capital sources. Page 3

Europe's financial services industry has undergone far less restructuring than predicted in preparation for 1992. Page 32

INTERNATIONAL

Some pension funds — whether they know it or not — are increasing their investments in international convertible securities. Page 1.

New York's Chase Manhattan Bank remains the leader in global custody market share, although its dominance has ebbed. Page 2

U.K. pension funds face a potential liability of up to $50 billion because of a legal ruling outlawing sex discrimination in setting benefits. Page 6

REAL ESTATE

Executives of four major U.S. pension funds tell conference-goers how they view investments in the real estate market. Page 1

The California State Teachers' Retirement System is looking at adding up to $2 billion in real estate in the next three to five years. Page 4

Real estate and comedy found some common ground at a New York City seminar on outlooks for the 21st century. Page 30

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Foreign business survey

Questionnaires for *Pensions & Investments*' annual survey of U.S.-based money managers' foreign business have been sent out. The deadline for inclusion in the survey, to be published July 23, is June 24. If you qualify for inclusion and have not yet received a questionnaire, or have questions about the survey, please contact Christine Philip, directory coordinator, at (312) 649-5217.

GIC/BIC industry rattled

Review of book-value accounting under way

By Fred Williams

The FASB's decision to address book-value accounting of guaranteed investments eventually could shake the foundation upon which the multibillion-dollar business is built.

If taken to the worst extreme, a ruling by the Financial Accounting Standards Board ordering market-value accounting for all guaranteed investments would make the instruments bond equivalents and halt the growth of the $200 billion industry.

Most observers, however, believe the FASB will find a way to equate book and market value for most existing contracts.

Guaranteed investment products long have been held at book, rather than market, value. Book-value accounting is what gives the contracts their unique structure of stable, long-term income at relatively high yields, without market value fluctuations. That stability has led participants in defined contribution plans to place up to 60% of their assets in the contracts.

Don Delaney, the FASB project manager in charge of the review, said guaranteed investment contracts and bank investment contracts should be considered like other assets and accounted for as such.

For years, the industry has avoided classifying guaranteed investments as an investment vehicle, instead referring to the popular asset class as annuities or insurance contracts. But Mr. Delaney said GICs "in my mind are nothing more than an investment vehicle, nothing like an insurance policy with elements of insurance risk," and should be accounted for at fair value, or market value.

"We don't think book value is the appropriate accounting treatment for them; it is misleading. People have become more aware that these are not guaranteed, and the underlying assets may not be as substantive and above risk as thought," he said.

Coming under specific criticism were non-benefit responsive contracts, which have no benefit payment provisions, frequently carry a somewhat higher yield and are used in some GIC portfolios to enhance overall yield.

"Some of these contracts will not take book value. How benefit responsive are they? Can assets be withdrawn at any time or only at maturity?" Mr. Delaney asked. "Our understanding is that, at

See **FASB** *on page 37*

Chase holds global custody lead

By Margaret Price

Chase Manhattan Bank remains the leader in global custody market share, although its dominance has ebbed and its services aren't the highest ranked.

These results come from a new, private survey of U.S. institutional investors undertaken by the New York consulting firm of Demmer-Fleming Group Inc.

Demmer-Fleming officials would not confirm any dollar amounts in market share. But sources familiar with the most recent survey's data said respondents placed $48 billion in New York-based Chase's global custody services, approximately double the amount placed with second-ranked State Street Bank & Trust Co., Boston.

That $48 billion does not reflect total assets under global custody by Chase, but only the accounts of clients among the 439 U.S. institutional investors surveyed. Respondents had a total of about $200 billion in global custody.

Following State Street in global custody market share were, in order, Bank of New York, New York; Bankers Trust Co., New York; Boston Safe Deposit and Trust Co., Boston; Citibank, New York; Northern Trust Co., Chicago; Security Pacific National Bank, Los Angeles; Morgan Stanley Trust Co., New York; and Bank of America, San Francisco. Figures were not available on the market shares of these banks.

The survey also found only two global custodians — Chase and State Street — have more than a 10% market share among customers questioned.

In terms of market share, the only surprise to Peter Demmer, Demmer-Fleming's president, was "the presence of Morgan Stanley," which entered the global custody business in 1988 and leapt to ninth place in the survey,

See **Chase** *on page 36*

No raves for stock futures move

Investors fear SEC might hike margins

By Trudy Ring

Institutional investors using futures say nothing would be gained by moving jurisdiction to the Securities and Exchange Commission.

The Treasury Department has proposed that the SEC regulate stock index futures, removing them from the jurisdiction of the Commodities Futures Trading Commission.

"I hope that wherever (the jurisdiction) ends up, they don't put restrictions on futures that would destroy the usefulness of the product," said Jack Meyer, treasurer and chief investment officer of the $2 billion Rockefeller Foundation, New York.

A case could be made for the SEC to oversee stock index futures because they are equity-related products, but it would be hard to endorse such a move if it went hand in hand with dramatically increased futures margins, said Jim Carder, president of Westridge Capital Management Inc., Los Angeles.

Margins, the money investors must put up for trades, are lower for futures than for stocks. Futures margins are 11% of the contracts' value for speculators and 5% for hedgers, while stock margins are 50% of value. It's possible that futures margins would be raised under SEC oversight.

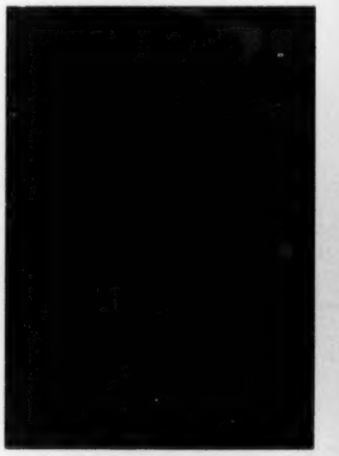
Futures users and industry officials, however, said they fear the SEC would not understand that margins play different roles in the stock and futures markets.

In the stock market, a margin is a down payment; the amount of margin regulates the amount of credit extended to buy securities. In the futures market, no credit is extended; margin payments serve as a guarantee that the sellers and buyers will honor their financial obligations.

"When you compare stock margins and futures margins, you're comparing apples and oranges," said Ed Peters, manager of asset allocation for PanAgora Asset Management Inc., Boston.

"Margins on futures are there to prevent default, and there have not been major defaults in the futures market," added Tom Allen, president of Advanced Investment Management, Pittsburgh.

Mr. Peters noted futures value and the corresponding margins are adjusted to market price daily, so only one day's profit or loss is at issue. When an investor buys stocks on margin, the liability can accrue for much longer periods, he said.



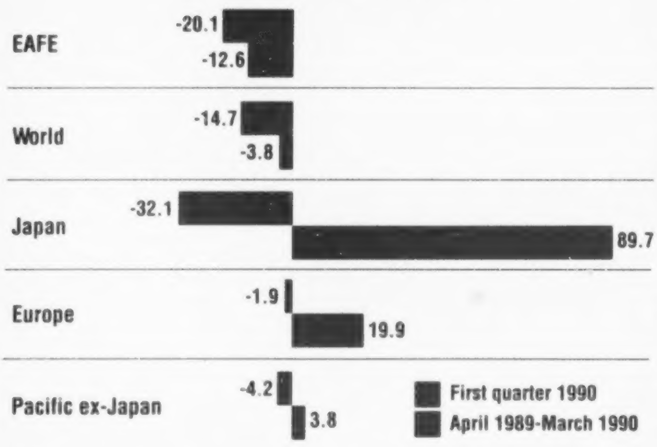
Jim Carder says he could not endorse moving stock index futures oversight to the SEC if dramatically increased margins were a result.

Also, proponents of raising margins don't recognize that individual stocks are going to have more volatility than the market as a whole, Mr. Carder said.

Mr. Meyer said higher margins are not such a big issue for institutional investors as for individu-

See **Futures** *on page 37*

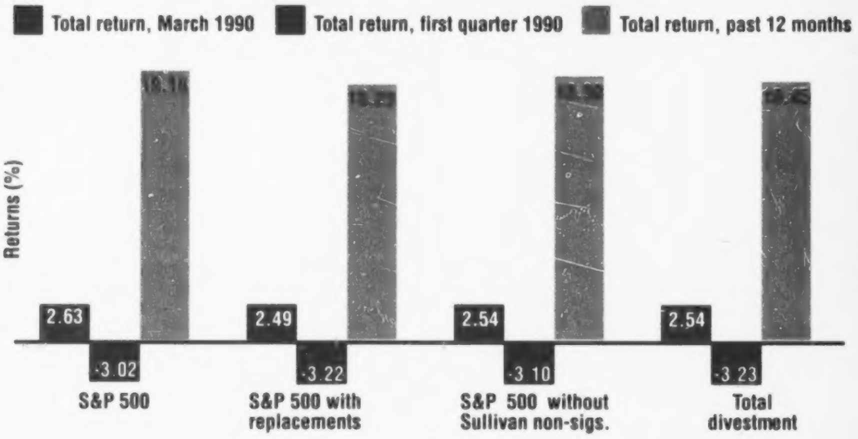
Morgan Stanley Capital International worldwide indexes



Source: Morgan Stanley Capital International, New York
Indexes are in U.S. dollar terms without dividends reinvested

Graphic by John Hall

The South Africa Free Index



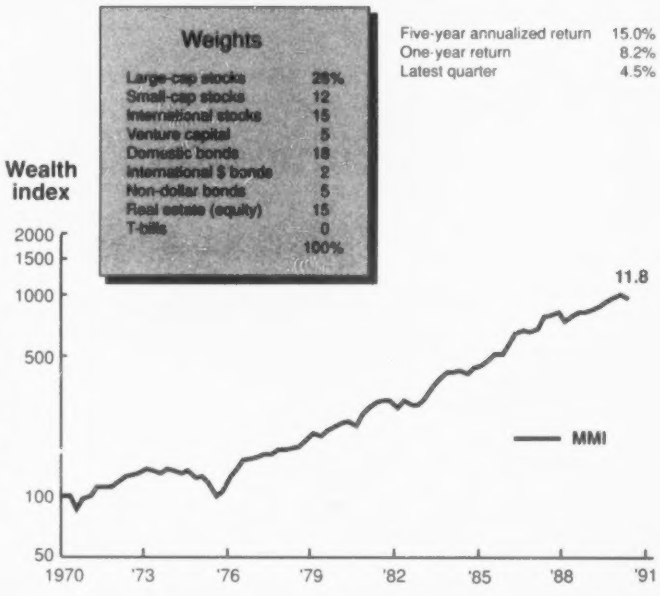
S&P 500 with replacements: Replaces a South Africa-related company with next largest company in the industry. **S&P 500 without Sullivan non-signatories:** Excludes 6 companies, no replacements. **Total divestment:** Eliminates all companies with South African involvement, no replacements.

Source: Wilshire Associates, Santa Monica, Calif.

Graphic by Holly Seguine

Multiple Markets Index

The Multiple Markets Index is a benchmark for total portfolio returns. It is composed of eight asset classes used by retirement plan executives; it is calibrated to reflect the same degree of risk of the typical pension portfolio; it uses passive fixed policy weights; and it represents the individual asset classes by the broadest and most complete market return data available.



Weights	
Large-cap stocks	28%
Small-cap stocks	12
International stocks	15
Venture capital	5
Domestic bonds	18
International $ bonds	2
Non-dollar bonds	5
Real estate (equity)	15
T-bills	0
	100%

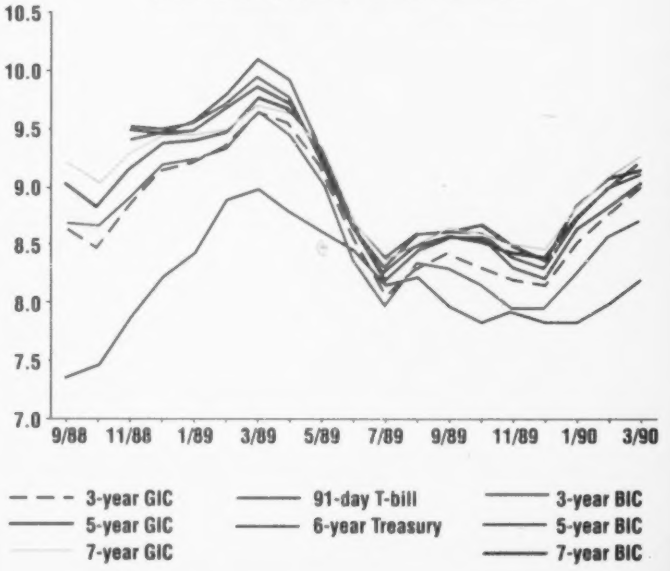
Five-year annualized return	15.0%
One-year return	8.2%
Latest quarter	4.5%

12/31/69 = 100
Data through 3/31/90
Graphic by John Smither

Source: Brinson Partners Inc., Chicago

Summary of average GIC & BIC data vs. market yields

(Bullet, compound $1 million contract)



Source: William M. Mercer Asset Planning Inc.

Graphic by Holly Seguine

First quarter 1990 returns

	Russell 3000®	Russell 1000®	Russell 1000® by market capitalization				Russell 2000®
			Large	Medium/large	Medium	Medium/small	
Technology	5.48%	5.72%	4.80%	9.45%	3.15%	4.91%	3.24%
Health care	−5.45	−5.49	−6.36	−4.30	−2.45	−4.34	−5.12
Consumer discretionary	−3.38	−3.42	1.05	−4.75	−2.82	−6.74	−3.10
Consumer staples	−4.80	−4.86	−2.96	−7.44	−7.14	−1.54	−2.79
Integrated oils	−1.62	−1.62	−1.97	2.96	−5.21	0.68	−5.23
Other energy	−2.10	−2.09	0.00	−2.00	−0.95	−6.03	−2.16
Materials and processing	−2.50	−2.50	−4.90	−5.37	−1.80	2.61	−2.52
Producer durables	3.48	3.88	8.63	2.18	0.56	4.80	−0.31
Auto and transportation	2.82	2.93	10.38	−1.57	−0.58	−1.53	1.04
Financial services	−8.85	−9.09	−17.85	−6.76	−9.23	−6.80	−5.20
Utilities	−7.63	−7.73	−8.73	−6.35	−7.26	−7.40	−3.96
Total	−3.22	−3.29	−2.65	−3.62	−4.03	−3.42	−2.21

Source: Frank Russell Co., Tacoma, Wash.

Shorter maturity GICs jump in first quarter

Spreads continue trend of final days of 1989

By Fred Williams

Rates on guaranteed investments moved higher in the first quarter and overall, shorter-maturity interest rates experienced the biggest increase.

The spread between average three-year and 10-year rates began the quarter at 0.31% and finished at 0.16%, according to Peter Bowles, president of Fiduciary Capital Management Inc., Woodbury, Conn.

Rates spiked up almost 100 basis points during the quarter, said Michael Odlum, vice president-fixed income group, GIC portfolio management at Chase Investors Management Corp., New York.

Spreads between guaranteed investment contracts and comparable maturity Treasury instruments started to widen in late 1989 and continued to hold in the 60 to 96 basis-point range during the first quarter, or slightly higher depending on the contract maturity and duration.

"My sense is that spreads are widening, and they should be. With higher rates you should get higher spreads and also for the lower credits there is more of a premium being attached," he said.

John Knight, president of Lamberson Knight GIC Inc., Short Hills, N.J., said rates on bank investment contracts were clearly higher than insurance company GICs, particularly in the shorter maturities, and interest in BICs was active throughout the quarter.

"About 60% of our business late in the quarter was BICs," said Mr. Knight. He said BICs were yielding 50 basis points over GICs in contracts with maturities of two years or less.

Insurance company rate quotations on representative five-year, single-deposit, simple interest, $1 million GICs as of March 30 and Dec. 29, as provided by Lamberson Knight and GIC Inc., Beaverton, Ore., are:

- Allstate Life Insurance Cos., Northbrook, Ill.: March 30, 9.1%; Dec. 29, 8.51%.
- Canada Life Assurance Co., Toronto: 9.12%; 8.34%.
- CNA Insurance Co., Chicago: 9.04%; no quote.
- Confederation Life Insurance Co., Atlanta: 9.35%; 8.75%.
- Connecticut Mutual Life Insurance Co., Hartford: 9%; 8.22%.
- Continental Assurance Co., Chicago: 8.94%; 8.34%.
- Crown Life Insurance Co., Toronto: 9.02%; 8.46%.
- John Hancock Mutual Life Insurance Co., Boston: 9.04%; 8.53%.
- Hartford Life Insurance Co., Hartford, Conn.: 9.07%; 8.58%.
- Life Insurance Co. of Georgia, Atlanta: 9.05%, no quote.
- Life Insurance Co. of Virginia, Richmond: 9.1%; 8.39%.
- Lincoln National Pension Insurance Co., Fort Wayne, Ind.: 9.26%, 8.6%.
- Mutual of New York, New York: 9.08%; 8.49%.
- New York Life Insurance Co., New York: 9.1%; 8.5%.
- Ohio National Life Insurance Co., Cincinnati: 9.33%; 8.61%
- Pan American Life Insurance Co., New Orleans: 9.14%; 8.59%.
- Penn Mutual Life Insurance Co., Philadelphia: 9.32%; 8.58%.
- Provident National Life Assurance Co., Chattanooga, Tenn.: 8.9%; 8.5%.
- SAFECO Corp., Seattle: 9.30%; no quote.
- Southwestern Life Insurance Co., Dallas: 9.06%; 8.57%.
- State Mutual of America, Worcester, Mass.: 8.9%; 8.44%.

William M. Mercer Asset Planning Inc., Northbrook, Ill., surveys insurance companies for rate quotations and provided the following summary of various bullet GICs for March 1990:

- Three-year, $1 million, compound: high, 9.35%; low, 8.33%; average, 8.98%.
- Three-year, $1 million, simple: high, 9.35%; low, 8.34%; average, 8.98%.
- Five-year, $1 million, compound: high, 9.5%; low, 8.25%; average, 9.17%.
- Five-year, $1 million, simple: high, 9.5%; low, 8.25%; average, 9.14%.
- Seven-year, $1 million, compound: high, 9.53%; low, 8.25%; average, 9.22%.
- Seven-year, $1 million, simple: high, 9.55%; low, 8.22%; average, 9.2%.
- Three-year, $5 million, compound: high, 9.42%; low, 8.55%; average, 9.04%.
- Three-year, $5 million, simple: high, 9.42%; low, 8.45%; average, 9.03%.
- Five-year, $5 million, compound: high, 9.53%; low, 8.25%; average, 9.21%.
- Five-year, $5 million, simple: high, 9.53%; low, 8.25%; average, 9.18%.
- Seven-year, $5 million, compound: high, 9.58%; low, 8.25%; average, 9.26%.
- Seven-year, $5 million, simple: high, 9.59%; low, 8.25%; average, 9.24%.

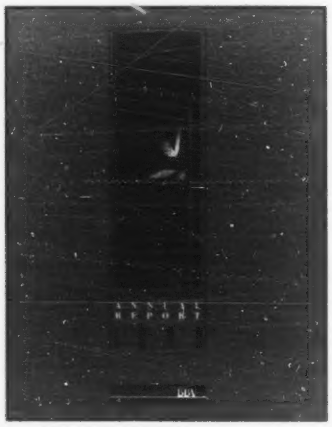
Schmidt Management Co., Tulsa, Okla., a guaranteed investment product market research and consulting firm, has developed a guaranteed product performance index. The Schmidt GIC Composite Index approximates the performance of a continuous, equally weighted, investment in one- to 10-year original-maturity GICs. (The index shows returns, not rates.)

Total returns for the quarter and 12 months ended March 31 were 2.3% and 10% respectively. In comparison, the Standard & Poor's 500 Stock Index returned −3% and 19.2%; the Merrill Lynch Government/Corporate Bond Master Index returned −1% and 11.8%; and 90-day Treasury bills, 1.9% and 8.1%.

Mercer also surveys banks for rate quotations on their guaranteed instruments. Rate quotes for one- and three-year bullet BICs for March were:

- One-year, $1 million, compound: high, 8.75%; low, 8.24%; average, 8.53%.
- One-year, $1 million, simple: high, 8.96%; low, 8.41%; average, 8.66%.
- Three-year, $1 million, compound: high, 9.25%; low, 8.71%; average, 9.02%.
- Three-year, $1 million, simple: high, 9.35%; low, 8.8%; average, 9.06%.
- One-year, $5 million, compound: high, 8.82%; low, 8.15%; average, 8.57%.
- One-year, $5 million, simple: high, 8.96%; low, 8.49%; average, 8.68%.
- Three-year, $5 million, compound: high, 9.29%; low, 8.56%; average, 8.98%
- Three-year, $5 million, simple: high, 9.4%; low, 8.83%; average, 9.09%. ■

Annual Reports



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8

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employees
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of service to
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AT DEADLINE

Kemper funds investigated

The U.S. Attorney's office is investigating allegedly improper stock index futures trading in two mutual funds of Kemper Financial Services Inc., Chicago.

P&I's sister publication, Crain's Chicago Business, reported the investigation stems from a class-action suit filed last year against the company and Thomas A. Richards, a former Kemper portfolio manager. The suit charges Mr. Richards allocated profitable index futures trades to an employee profit-sharing plan he helped manage, and assigned unprofitable trades to the mutual funds he managed — Kemper Option Income Fund the Kemper Investment Portfolios Option Income Fund.

Attorneys for Kemper and Mr. Richards confirmed a criminal investigation is being conducted.

Fund bookkeeping faulted

A state audit criticized the Indiana Public Employees' Retirement System for sloppy bookkeeping and computer errors that resulted in miscomputation of benefits in 78% of the less than 50 benefit computations examined. Phillip Smith, executive director, said some of the problems already had been corrected.

Kidder unit quits New York

Kidder, Peabody is moving its asset consulting group to Chicago from New York, said Ted Disabato, senior vice president.

Managers, trustee chosen

Ithaca College's endowment fund hired Avatar Associates to manage a $15 million balanced account, said Carl Sgrecci, Ithaca vice president and treasurer. Fleet/Norstar Investment Advisors was terminated. The endowment also will increase its $30 million account with Sanford C. Bernstein, but Mr. Sgrecci declined to say by how much.

Oregon Public Employes Retirement System hired two alternative equity managers — the Zell/Chilmark Fund and Hancock International Private Equity Partners — for $25 million each, said Jim George, investment manager.

The pension funds of **General Public Utilities Corp.** and **BASF Corp.** and the **Idaho Public Employees Retirement System** are among the initial investors in Prudential Real Estate Investors' new closed-end fund, Strategic Performance Fund-1. The fund will invest in industrial, apartment and office properties in growth areas.

Michigan Municipal Employees Retirement System selected Wells Fargo Nikko Investment Advisors and Lombard Odier International Portfolio Management as its first international money managers.

The 15 pension plans of **Time Warner**, formed from the merger of Warner Communications and Time Inc., appointed Bankers Trust as master trustee.

London's Mayfair Building is one of several Randsworth properties now in the real estate portfolios of 13 U.S. funds.

U.S. pension funds buy London realty

By Steve Hemmerick

A dozen U.S. pension funds and an endowment have invested nearly $300 million in London property, the first significant step in global bargain hunting for real estate by domestic funds.

The investors — including the $14.3 billion American Information Technologies Corp. pension fund and the $3 billion Massachusetts Pensions Reserve Investment Management Board — bought limited partnership interests in what had been a publicly traded real estate company, Randsworth PLC.

Randsworth owns 35 properties in the West End of London, of which 70% are office and the remainder, retail.

"We bought a great location and in time that is what will pay off," said Paul F. Quirk, executive director of Massachusetts PRIM, which invested $25 million in Randsworth.

Before the Randsworth deal this year, U.S. pension funds had virtually restricted themselves to investing only in North American property, and almost all of that in the United States.

Indeed, only a smattering of pension funds have bought real estate in the London area.

Ameritech recently did a joint venture with a Dutch pension fund for a London office property. The initial cash yield on the deal will be about 6%, but the longer term return should be between 13% and 14%, said L.B. "Tom" Thompson, director of real estate investment for Ameritech.

Also, the $800 million Eastern Airlines Variable Benefit Plan for Pilots has invested "several million" more in apartments in London, according to Charles Dyer, director of the fund. He said he wishes the fund had more money to invest in London flats.

Eastern is one of only two pension funds known to have invested in Europe prior to the Randsworth deal. The other is GE Investment Corp., which has some holdings in the United Kingdom, according to Joel Wilson, vice president for real estate. GE In-

See **Randsworth** *on page 42*

SEC is quizzing consulting firms

Probe aimed at conflicts of interests

By Joel Chernoff

The Securities and Exchange Commission is probing whether investment management consultants face real or potential conflicts of interests in recommending money managers.

A six-page questionnaire sent in April by the SEC's New York office asks consultants to detail their business practices, including how managers are recommended and whether the consultant receives any cash or soft-dollar payments from the manager.

SEC officials refused to discuss the document, and would not confirm or deny if they are investigating the consulting industry.

In its cover letter, the SEC says it is "conducting an informal review of the business practices" of money managers who are recommended by consultants. But most consultants viewed the survey as an effort to get a better handle on consulting industry practices.

Consultants said they believe the SEC is trying to build up its expertise in the consulting area, and is not engaged in a wholesale investigation of the industry. The questionnaire apparently was sent only to consultants covered by the SEC's New York office, which covers New York and New Jersey.

Several consultants welcomed the SEC's probe, reflecting concerns the consulting industry is being swamped by a growing number of individuals who have conflicts of interests.

"The trustee needs to know if there is any inherent conflict," said Anthony F. Lotruglio, president of QUAN-VEST Consultants Inc., Manhasset, N.Y.

See **Consultants** *on page 45*

Explosion in ECUs

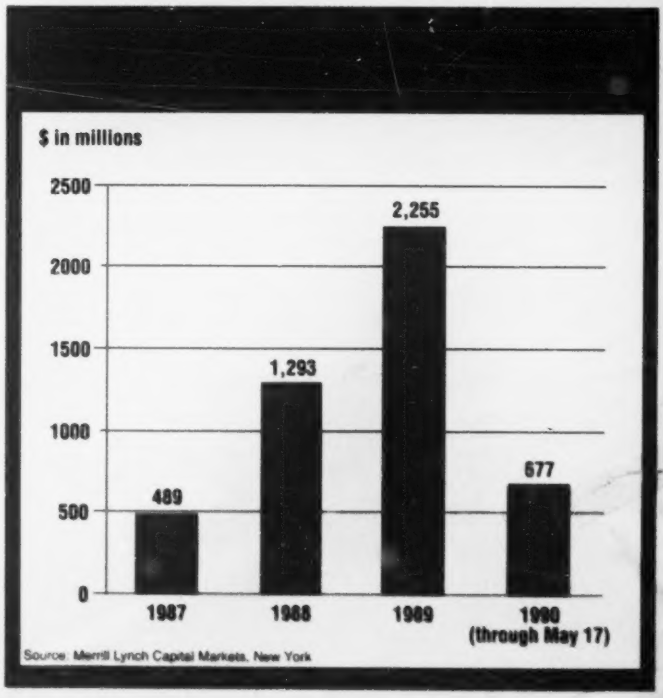
Institutions fueling the market's growth

By Marlene Givant Star

The European currency unit market is exploding for issuers and investors.

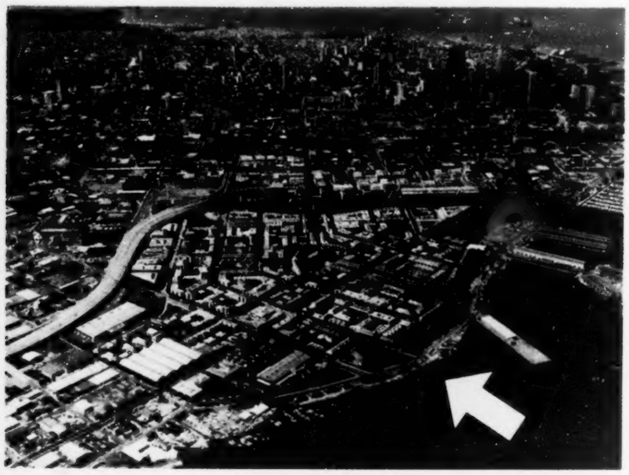
More and more U.S. and foreign corporations are issuing high-quality bonds denominated in the composite of European Community currencies, drawing institutional investors to a market historically dominated by retail buyers. Institutions are lured by the diversification inherent in the

See **ECUs** *on page 44*



Source: Merrill Lynch Capital Markets, New York

NEWS DIGEST



This artist's rendering of Mission Bay shows the waterfront project being developed by Sante Fe Realty. The California Public Employees' fund will have directors on Santa Fe's board.

The California Public Employees' Retirement System will embark on a test of corporate governance in the spin-off of Santa Fe Realty. Page 36

Pension portability proposals could be thwarted by political pressure to tame the U.S. budget deficit. Page 39

SPECIAL REPORT: MUTUAL FUNDS

Limits on asset-based fees are being proposed by the National Association of Securities Dealers. Page 19

Recordkeeping capability is perhaps the most important consideration of pension fund executives when choosing which mutual fund company to use. Page 19

Banks are becoming big players in the mutual fund industry. Page 19

FINANCING

The European currency unit market is becoming a booming area for both issuers and investors. Page 1

Master limited partnerships are mulling re-incorporation in order to attract institutional investors. Page 3

INTERNATIONAL

Passive international investing seems to be losing its gleam as the best way for pension funds to invest in foreign markets. Page 3

Banks eager to lend foreign securities owned by U.S. pension funds want changes in some of the rules. Page 34

REAL ESTATE

Twelve U.S. pension funds and one endowment plunk down nearly $300 million for property in London. Page 1

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Foreign business survey

Questionnaires for *Pensions & Investments'* annual survey of U.S.-based money managers' foreign business have been sent out. The deadline for inclusion in the survey, to be published July 23, is June 24. If you qualify for inclusion and have not yet received a questionnaire, or have questions about the survey, please contact Christine Philip, directory coordinator, at (312) 649-5217.

Off to the rescue

Turnaround deals lure 4 funds

By Marcia Parker and Margaret Price

Three corporate and one public pension fund are among eight major institutional investors in a $91.5 million partnership that purchased controlling equity interests in two undervalued middle-market companies with correctable problems.

The pension funds of Honeywell Inc., Unisys Corp. and Southern New England Telephone Co. and an unidentified public fund, invested in Recovery Equity Investors LP. The relatively unknown San Mateo, Calif., firm is run by a small group of experienced businessmen and lawyers with experience in turnarounds.

Other institutional investors include an insurance company and a bank holding company, which were not identified. Recovery Equity's first investments are a regional railroad and three specialty paper mills.

And Capstone Partners Inc., a new Dallas-based buy-out boutique that takes mostly equity stakes in industrial companies, has attracted one institutional investor — BT Capital Corp. — as a partner in its first major deal. The buy-out group just bought Tracor Hydro-Services, the environmental services division of Tracor Inc., Austin, Texas.

Capstone will seek other partners, including institutions, to invest on a deal-by-deal basis in industrial companies with a focus on environmental services, the automotive aftermarket and aerospace. BT Capital is the venture capital subsidiary of Bankers Trust New York Corp., which primarily funds BT Capital.

Also, a $40 million investment made by the $18.7 billion Florida State Board of Administration in First Bank System Inc., Minnesota, is that fund's first voyage into a relatively new area for institutional investors — once-troubled banks on the verge of a turnaround.

These investments reflect the growing interest of institutional investors in alternatives to traditional public debt and equity investments.

David White, vice president-capital management for the $5 billion Unisys fund, said Unisys invested $20 million in the Recovery Investors partnership. He looks for an internal rate of return upward of 20%.

It is Unisys' first investment in the ailing company arena, and Mr. White expects to make more. He is looking at other partnerships that invest in distressed companies or their securities.

"I think the opportunities (in troubled companies) will be very numerous. It's a strategic play to get into this area," Mr. White said. "It's a small fund. We wanted to get into the smaller company distressed companies. There are plenty of ways to get into the big companies. . . . That's an overcrowded market today."

Jeffrey Lipkin, general partner of Recovery Equity, said there are plenty of companies in crisis that can be turned around with the help of experienced management and an equity capital infusion. Recovery Equity invests in established manufacturing, finance, service and operating real estate companies with revenues of $25 million to $250 million, developed technologies and a need for equity infusion or credit enhancement of $3 million to $11 million.

The group's first two deals are expected to close later this month. While Mr. Lipkin declined to name the companies, he said the

See **Turnaround** *on page 46*

3 execs make job changes

A pension executive-turned-consultant is returning to the corporate side while two of her counterparts are leaving pension posts.

Judith W. Mares, principal of Mares Financial Consulting, Minneapolis, and former assistant treasurer of General Mills Inc., has been named chief investment officer at American Information Technologies Corp., Chicago.

Meanwhile, John Chenoweth has resigned as executive director and chief investment officer of the $900 million Minneapolis Employees' Retirement Fund, and Alan V. Hall, formerly chief investment officer for the $7 billion Shell International pension fund, London, will be joining First Quadrant Corp., Pasadena, Calif., as a principal.

Ms. Mares succeeds Donald W. Phillips, who left Ameritech to become executive vice president of Equity Financial and Management Co., Chicago.

Ms. Mares, who joins Ameritech June 18, will oversee the company's $14 billion pension and savings funds. She will report to Carl Koch, vice president and treasurer.

She formed her consulting firm in Minneapolis in 1988, after leaving Norwest Bank, Minneapolis, where she served as vice president and managing director of investments.

In announcing his resignation, Mr. Chenoweth said he plans to take the summer off,

See **Moving** *on page 41*

Harvard gets a new captain

Meyer to set anchor for $5 billion fund

By Marlene Givant Star

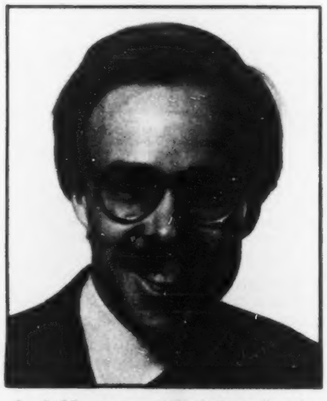
If there's one thing missing at the $5 billion Harvard University endowment, which for years has sailed into uncharted investment seas, it's an anchor.

Jack Meyer, treasurer of New York's Rockefeller Foundation, plans to change that when he takes the helm of Harvard Management Co., the university's investment arm.

The first thing he'll do is create what he calls a policy portfolio — a benchmark of sorts — to support Harvard's spending policy over time without overstepping its risk parameters.

The anchor will allow the fund to confidently continue its course of significant private investments from oil and gas to venture capital.

"If Harvard has a weakness, the weakness may be in the context. I'm not sure the portfolio is ideally suited to the (university's) risk tolerances and spending requirements," said the 45-year-old Mr. Meyer, who assumes his new post Sept. 1.



Jack Meyer want to take a fresh look at Harvard's in-house management of assets.

Mr. Meyer will evaluate each of Harvard's asset classes to determine whether in-house active management has been successful or whether in-house passive or external management would be more suitable.

Mr. Meyer will succeed Walter Cabot, president of Harvard Management since it was formed in 1974, who is retiring. Mr. Cabot will continue to advise the fund on private investments.

A search is under way for Mr. Meyer's successor at the Rockefeller Foundation, and he hopes to have a role in the process.

Mr. Meyer will be in charge of a staff of more than 100 professionals at Harvard, which manages a significant amount in-house.

"There are a number of strategies I would like to try. Beginning Sept. 1, I'll have the resources to do it," Mr. Meyer said.

Many of these will be trading strategies that could not be implemented cost effectively in-house at a smaller fund.

Mr. Meyer also plans to get involved in Harvard's social investing decisions. The fund recently divested of tobacco stocks. Companies doing business in South Africa in which Harvard holds stock subscribe to the Statement of Principles.

"I have no problem with Harvard divesting its tobacco stocks. The cost was probably quite minimal while the social impact could be major. But I could envision divestment strategies that could be very harmful," he said.

Rockefeller didn't divest of South African stocks; instead, it was able to fund organizations that fight apartheid.

Another priority for Mr. Meyer

See **Harvard** *on page 46*

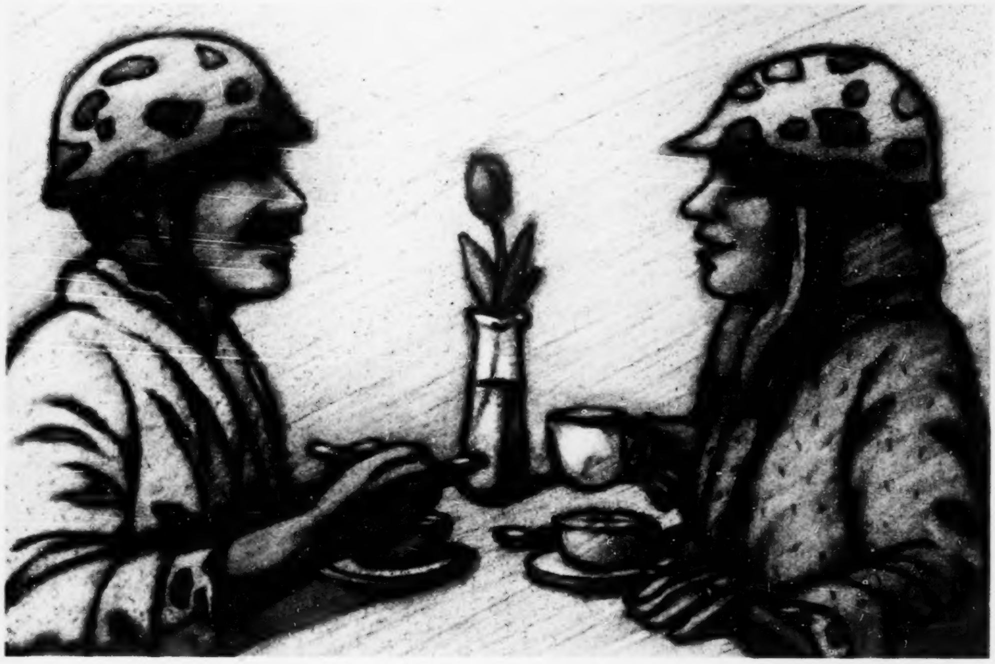


Illustration by Douglas Bowles

PEOPLE

Corporate restructurings a family affair for couple

■ In their five years of marriage, Raymond and Amy Minella have been on opposite sides of more than just the breakfast table.

These days Amy, senior vice president of Deltec Securities, a New York-based high yield bond manager, is heading up the creditor's committee of Southland Corp.'s restructuring.

That deal is underwritten by Merrill Lynch Capital Markets, where Raymond is managing director and co-head of merchant banking.

While Mr. Minella isn't involved in the Southland deal, he worked directly opposite his wife at the bargaining table on the restructuring of Fruehauf Corp., which concluded last fall.

Miraculously, the high yield wars don't seem to have ravaged the Minellas' home life. After all, the two were an item long before the days of junk bonds. Before joining Deltec seven years ago, Amy met Raymond working with him in the corporate finance area at Merrill.

INTERNATIONAL

Hong Kong puts on its best face

■ Hong Kong put on a pretty face for a high-profile, costly advertising campaign and conference in May at the Asia Society's elegant Park Avenue office and a glittering dinner at the posh Waldorf Astoria Hotel.

Whether or not the effort pays off in a rash of proposals from dealmakers and investor-suitors remains to be seen.

High level government officials, bankers and corporate leaders talked up foreign investment to counter reports of a significant outflow of foreign capital and professionals as it gets closer to the day Britain turns over control of the high-flying financial and trade center to China in 1997.

The conference drew bankers, corporate executives and a smattering of institutional investors, many of whom seemed intrigued with investment opportunities there and in the region. Some dealmakers say they are making follow-up calls to pursue possible investments.

Hong Kong is hoping to see investors flock to its door.

But in spite of a herculean effort to downplay any hint of persistent international concerns about the question marks in Hong Kong's future, many expressed reluctance to make big capital commitments until they see whether China adopts a promised laissez faire policy for Hong Kong.

REAL ESTATE

Office developers face a Catch 22

■ Office building developers appear to be in a no-win situation with pension funds.

On the one hand, pension funds will be the leading source of direct funding of commercial office buildings in the 1990s, according to nearly 50% of the respondents to a survey of members of the American Society of Real Estate Counselors.

On the other hand, pension funds are becoming more cautious about investing in offices because of declining returns.

Half the respondents also feel the next wave of office development will be in central business districts.

GICs

Putnam creates FASB-proof trust

■ The Putnam Cos. has developed what it considers an appropriate response to the FASB review of book-value accounting of guaranteed investment products.

Its new guaranteed fixed-income product contains neither insurance nor bank contracts. Instead, investments will be in ordinary U.S. government agency securities and bonds.

Putnam packages the securities in individual trust accounts with a guaranteed rate of return and book-value accounting.

Called Putnam Guaranteed Horizon Trusts, the trusts are well-positioned for possible requirements by the Financial Accounting Standards Board that guaranteed products be marked to market, said Sandra Whiston, Putnam vice president.

"We value the securities in the portfolio to market, and plan participants are entitled to the net amount of the fair market value."

Alan. J. Bankart, Putnam managing director and chief investment officer, said individual portfolios are created, allowing the firm to lock in a rate of return to a fixed point in the future and manage the assets as an immunized fund.

In addition, an agreement has been signed between Putnam and Morgan Guaranty Trust Co. for a credit facility, said Ms. Whiston, whereby Morgan "stands behind the designated amount for reimbursement" to the plan sponsor in the event Putnam defaults or lacks funds to provide the guarantee.

INVESTING

Thrift Board widening its options

■ The Federal Retirement Thrift Investment Board will switch to a broader fixed-income index fund next year.

Currently, assets directed to the board's F Fund are invested in an index fund that tracks the Shearson Lehman Hutton Government/Corporate Bond Index.

But the $5.8 billion thrift plan will shift to a commingled fund that tracks either the Salomon Brothers Broad Investment Grade or Shearson Lehman Hutton Aggregate bond indexes.

Unlike the government/corporate index, the BIG and aggregate indexes include mortgage-backed securities, which will provide participants "the potential for somewhat higher returns and greater diversification," said Francis X. Cavanaugh, executive director.

As of April 30, only $29 million was invested in the bond fund, but that figure could climb sharply if pending legislation expanding participants' ability to invest in stocks or bonds passes Congress. The House of Representatives passed a bill April 24 that would lift many of the investment restrictions.

More than $100 million is invested in the board's stock fund, which will continue to track the Standard & Poor's 500 Stock Index. The bulk of the assets are invested in the internally managed G Fund, which is invested in special Treasury securities.

Both the bond and stock accounts are managed by Wells Fargo Institutional Trust Co., but that three-year contract will expire Dec. 31. The board plans to issue requests for proposals on the stock and bond contracts in early August.

MONEY MANAGERS

Insurer spins off Boylston Capital

Frederick K. Zimmerman is president of Boylston Capital.

■ The New England has spun off another of its money management affiliates, Boylston Capital Advisors, with the new firm specializing in private placement securities, commercial mortgages and portfolio strategy for pension funds and small insurers.

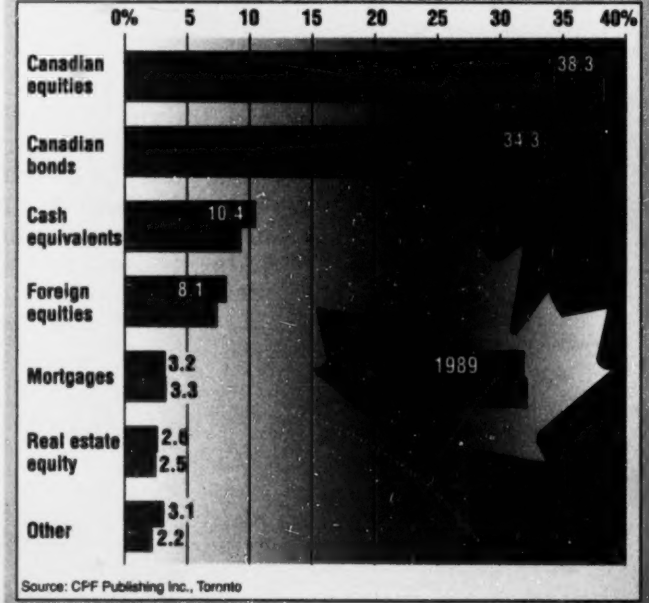
Boylston Capital was a separate division of The New England, managing its $7 billion in private placements, mortgage portfolios and guaranteed investment contracts. The firm will continue to manage The New England's portfolio while marketing its services to other institutional investors.

Ralph Verni, president and chief executive officer of New England Investment Cos. Inc., Boston, said Boylston Capital was spun off so the principals — Frederick K. Zimmerman, president, and Charles A. Morss, Adrian B. Corbiere and John F. Guthrie, executive vice presidents — could have the flexibility to develop the business.

The New England last spun off an affiliate in 1982, creating Copley Real Estate Advisors, which ranks as No. 3 manager of real estate equities for pension funds.

Canadians hold steady

The asset mix of the 500 largest Canadian pension funds, year-end 1989 vs. year-end 1988.



Source: CPF Publishing Inc., Toronto

Fees come under scrutiny

NASD, with a nudge, proposes 12b-1 charge limits

By Margaret Price

At the request of the mutual fund industry, the National Association of Securities Dealers, Washington, is proposing to limit asset-based charges used for sales and distribution of mutual funds.

The move is the result of concerns by the Securities and Exchange Commission and others that such fees can be excessive and/or inadequately disclosed by mutual fund companies.

Currently, 12b-1 charges are the only asset-based charges that pay for a fund's sales and distribution. These fees, begun after the SEC adopted rule 12b-1 in 1980, run as high as 1.25% of a fund's total assets. At year-end 1989, 56% of mutual funds charged 12b-1 fees, according to Lipper Analytical Services, Inc., Summit, N.J. These fees replace or supplement loads for funds sold through brokers and other distributors.

A year ago, the mutual fund industry asked the NASD to design limits on asset-based fees after the SEC proposed its own rules. The industry approached the NASD because that group already sets a maximum fee for front- and back-end loads, totaling 8.5% on the offering price on funds its members sell.

If the NASD's membership approves its proposed amendment to its sales charge rule that includes caps on 12b-1 fees, the amendment could be submitted to the SEC by late summer or early fall, said A. John Taylor, NASD vice president.

According to Mr. Taylor, the SEC, in proposing new rules two years ago, was concerned 12b-1 fees might "exceed the NASD's maximum sales charge rule." Other concerns center on adequate disclosure of the fees and their effect on funds and their shareholders. One issue cited by Kenneth Lehn, the SEC's chief economist, is "whether the fees work to benefit shareholders or if they raise expenses without providing a countervailing benefit."

Individual investors could be at greater risk than institutions, which can use consultants in selecting funds. For example, Joseph Scarella, consultant with Wyatt Asset Services Inc., New York, cited an "unwritten rule" in his firm "always to consider (recommending to clients) no-load funds and funds without 12b-1 fees before using other funds."

Jerry Woodham, treasurer of Washington University, St. Louis, said the $1.3 billion endowment "only invests in mutual funds with no loads and no 12b-1 fees." The endowment has about $100 million in three equity mutual funds — the Acorn Fund, managed by Harris Investment Management Inc., Chicago, and the 20th Century Growth and and 20th Century Select funds, part of Investors Research Corp., Kansas City, Mo.

"We are able to get other non-mutual fund managers that don't impose (such) fees," Mr. Woodham said. To justify paying these fees, "we would have to find a mutual fund that outperformed the market and other managers, and I have not seen that to be the case."

A study on 12b-1 fee costs and benefits by Charles Trzcinka, associate professor of finance at the State University of Buffalo, New York, found the fees have "little redeeming values for institutional investors." For the retail sector, their "only redeeming value is the service they pay for from brokers."

The study said the 12b-1 rule "has increased expenses, lowered net returns and had no effect on growth" of the funds. The study also noted "funds with below-average risk have a higher net return when they adopt a 12b-1 plan than funds of identical risk without a plan. Conversely, funds with above average risk have a lower net return when they adopt a 12b-1 plan."

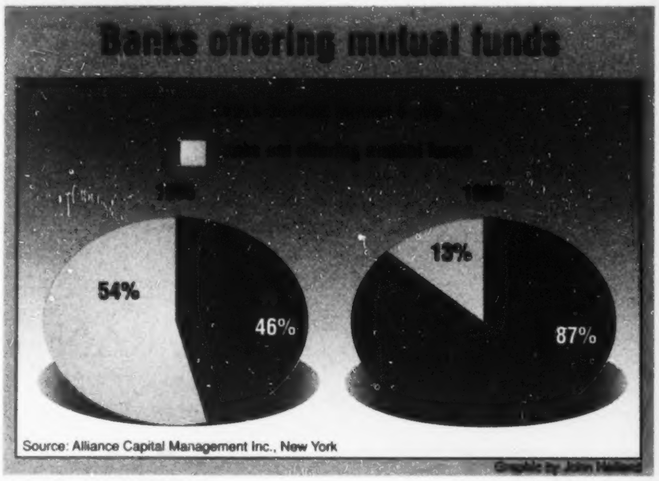
Mr. Trzcinka studied 612 funds while employed at the SEC. In February, he submitted the report to the SEC.

The study's results have elicited various responses. The SEC's Kenneth Lehn said the study "suffered from (undefined) methodological and data problems." He added, however, he "didn't necessarily disagree with its conclusions." He said the SEC was currently undertaking another study, expected shortly, on 12b-1 fees.

Jacob Dreyer, chief economist of the Investment Company Institute, Washington, also criticized the Trzcinka study, in part on how the expense ratios for the funds were calculated. The ICI argued that any load had to be included in total fund expenses.

Mr. Trzcinka said he looked at funds' expenses after the load was paid. Had he factored the load into expenses, he said, "for many funds, 12b-1 fees would have had a more negative effect on performance."

See **Fee scrutiny** *on page 22*



Source: Alliance Capital Management Inc., New York

Graphic by John Holland

Banks move swiftly to grab piece of pie

By Fred Williams

Banks have become major players in mutual funds, capturing a larger piece of the action as banking becomes more of a fee-based business and less dependent on lending.

Whether initiating internally managed private label funds or marketing outside mutual funds, banks are going to be in the mutual fund business in some form despite restrictions in the Glass-Steagall Act that prohibit banks from underwriting and distributing their own funds.

According to a 1989 study by Alliance Capital Management Inc., New York, use of mutual funds created and run by banks has increased to 34% from 17% in 1987. Of the 39 banks with these proprietary funds in 1989, 23 also sold third-party mutual funds.

The Alliance survey is based on responses from 160 of the largest 300 commercial banks.

"That Glass-Steagall has failed to keep banking and mutual funds separate is indicated by the fact that some 87% of (banks with assets greater than $1 billion) currently make mutual funds available to their clients. Narrowing the universe to the largest 25 banks, fully 23 offer fund shares, including 15 as investment advisers and 17 through discount brokerage units (with nine banks serving both functions)," said John C. Bogle, chairman and chief executive officer of the Vanguard Group of Investment Cos. in a March speech.

Vanguard has no intentions of offering its mutual funds through banks, preferring to retain direct

See **Banks move** *on page 27*

Recordkeeping gets high marks

By Leonard J. Hollie

Corporate executives are demanding lower costs, a variety of choices and consistent performance when choosing mutual funds for their defined contribution plans.

"A company will look for a full-service mutual fund organization that can provide a variety of options and recordkeeping capability," said Mary Ann Johnson, president of Tremont Partners Inc., a New Canaan, Conn.-based consulting firm.

"Recordkeeping receives the most attention," she said, estimating 80% of the decision on which mutual fund company is chosen is based on its recordkeeping ability. "The investment side is sometimes secondary," Ms. Johnson said.

Michael Beasley, senior vice president of Callan Associates Inc., Atlanta, said those companies that can offer both recordkeeping expertise and investment options that can be easily communicated to participants offer a package hard to beat.

"Recordkeeping was a serious issue in deciding which vendor to choose," said William Smith, consultant in the financial and benefits analysis department of E.I. du Pont de Nemours & Co., Wilmington, Del. "The ability to provide accurate and timely information to participants was crucial," he said, as was investment strategy and performance record.

The $5.7 billion defined contribution fund has $260 million invested in seven mutual funds, including the Magellan Fund, managed by Fidelity Management & Research Co., Boston.

Stability and consistency of the fund's manager and demonstrated investor appeal of the fund go into the choice of a mutual fund, Mr. Smith said.

"We are looking for recognizable names that participants are familiar with," said Mr. Smith. "We wouldn't offer funds to our investors that have a narrow investment strategy, or that have an inherent risk. We also try to keep our mutual fund options to a reasonable number that is distinct, so that we can see the difference in the funds," he said.

Ruth Hughes-Guden, director, investment advisory for Rogers, Casey & Associates Inc., Darien, Conn., said her firm offers a "fund of funds," for seven defined contribution plans, packaging several mutual funds with a variety of investment approaches.

"The bottom line is we choose mutual funds that have no load and no 12b-1 fees," said Ms. Hughes, referring to the asset-based fees used to pay for sales and distribution of mutual funds.

"We will use load funds, but only if they waive the charges," she said.

Ms. Johnson said: "Mutual fund complexes are also changing their fee structures and are charging lower fees so there is an increase in the net return to participants."

Many companies, especially those with big defined contribution plans, are looking at the investment side, and how to lower the cost, get better choices and better performance.

Consultants also say they are seeing an increase in the number of mutual funds used in companies' defined contribution plans, with firms choosing a mutual fund to fit a particular need.

Ms. Johnson, for example, said the most popular mutual fund investment is an index fund.

Joseph R. Lawhead, assistant treasurer and benefits administrator for Procter & Gamble Co., Cincinnati, said he chose two fixed-income mutual funds, a bond fund and a money market fund 10 years ago because "they met our objectives of getting both quality and a higher yield."

Terry Endsley, director of banking investments for Navistar International Transportation Corp., Chicago, said Navistar executives chose a mutual fund for its manager.

"The only way we could get access to Mario Gabelli was through a mutual fund," said Mr. Endsley. "We liked his track record and his performance."

Mr. Endsley said Navistar wanted to give participants a

See **Records** *on page 22*

"Knowledge is of two kinds. We know a subject ourselves, or we know where we can find information upon it."

Samuel Johnson
1775

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Banks move

Continued from page 19

contact with investors without intermediaries, Mr. Bogle said.

Although Mr. Bogle believes banks will be small frys in the mutual fund business, other mutual fund executives see bank participation growing.

Joseph Grause, senior vice president for institutional banking services at Fidelity Investments, Boston, said the use of mutual funds by banks is on the rise through the use of funds in trust departments and proprietary bank funds.

"Both trends are drawn from the same economic engine. The banking industry is consolidating and, for various reasons, is seeking more fee income through fee-generating business such as mutual funds," he said. Mr. Grause said 15% (or $16.5 billion of the nearly $110 billion) of Fidelity's mutual funds are bank assets, compared with 9% to 10% at least three years ago.

Indeed, banks are an important source of investment assets for some major fund distributors.

Jerry Potts, vice president and head of banking and thrift industry marketing at Massachusetts Financial Services, Boston, said MFS does between $600 million and $700 million each year through banks, representing 17% to 20% of the company's business since 1986.

Mr. Potts predicts banks' share of MFS' business will reach 40% to 50% within four to five years.

MFS funds are offered by banks not as a replacement for common trust funds, but as an addition that enhances bank fees and improves services.

"Mutual funds (offered by banks) service those middle consumers below the trust minimums, and it also teaches banks how to sell their trust department and other bank services," he said.

"Realistically, the banks understand that to be a player, they can't just offer their own funds, just as Merrill Lynch can't offer just its own funds to its customers. They sell a lot of outside funds too," said Mr. Potts.

Several banks recently launched in-house mutual funds to replace common trusts. Bank executives say the change improves service and simplifies the investment process. Common trusts may not be promoted, but funds may; and separate trust funds must be set up for each category of client, whereas assets may be mixed in a mutual fund.

According to Lipper Analytical Services Inc., Summit, N.J., 88 banks offer proprietary or private label mutual funds. Geoff Bobroff, Lipper senior vice president, said most are larger money center and regional banks.

But some money center banks have yet to begin offering proprietary funds. That list includes Chemical Bank and Bank of New York, Mr. Bobroff said.

He said the number of new entrants is declining, "probably because the market is reaching critical mass. It may be hard for some banks to justify it if they can't attract new assets beyond what they can transfer from existing funds."

Yet the Bank of Oklahoma, Tulsa, is establishing six proprietary mutual funds and will use Winsbury Co., Columbus, Ohio, as distributor to comply with provisions of Glass-Steagall.

A unique feature of the Bank of Oklahoma plan is to use an outside investment firm, AMR Investment Services, Fort Worth, Texas, as a partner.

AMR will manage the bank's money market fund, will co-manage, with the bank, the government money market fund and will consult on the management of the bond fund. The remainder will be managed solely by the bank.

Phil Owings, a senior vice president and trust officer at Bank of Oklahoma, said the bank teamed up with AMR because "they ran money in a fashion which didn't conflict with what we do, and they were looking for institutional business and we were looking for a retail outlet."

Mr. Owings said the bank eventually will replace its common trust funds with its new family of proprietary funds called American Plus Funds.

"We will keep the common trusts, which have tax consequences for participants, and as those tax items work their way down, all the money will be shifted to the mutual funds as rapidly as we can do it without adversely affecting our existing trust clients," he said. The bank has $800 million to $900 million in trust assets, and Mr. Owings said he expects about $650 million to $700 million to be converted to the mutual funds fairly rapidly.

James Ryan is president of Trust Advisory Group, Westport, Conn., which specializes in assisting banks in developing private-label funds. He said: "We encourage banks to manage the assets in these funds themselves and capture the investment management fees. . . . Outside funds are not the most efficient route for banks to go."

Dick White, executive vice president of Premier Bank N.A., Baton Rouge, La., said Premier was "one of the first banks to make a complete conversion" from common trust funds to mutual funds doing so last December.

Premier started the Paragon Portfolios group of funds in lieu of bank commingled trust funds on a no-load basis, but retail customers are charged fees.

Mr. White said the bank also offers outside mutual funds because "we recognize that we have gaps in our funds — we don't offer an international fund or a longer term bond fund."

First National Bank of Gainesville (Ga.) recently announced it will use Fidelity's equity and fixed-income mutual funds in its investment program. "By adding mutual funds to our trust program, we are able to increase revenues, ensure quality performance through investment management and devote more time to client relationships and services," said Richard T. Allison, group vice president, trust services. ▪

Money movers is a section that details the appointments of money management firms for tax-exempt funds.

The money movers section appears in each issue of *Pensions & Investments*.

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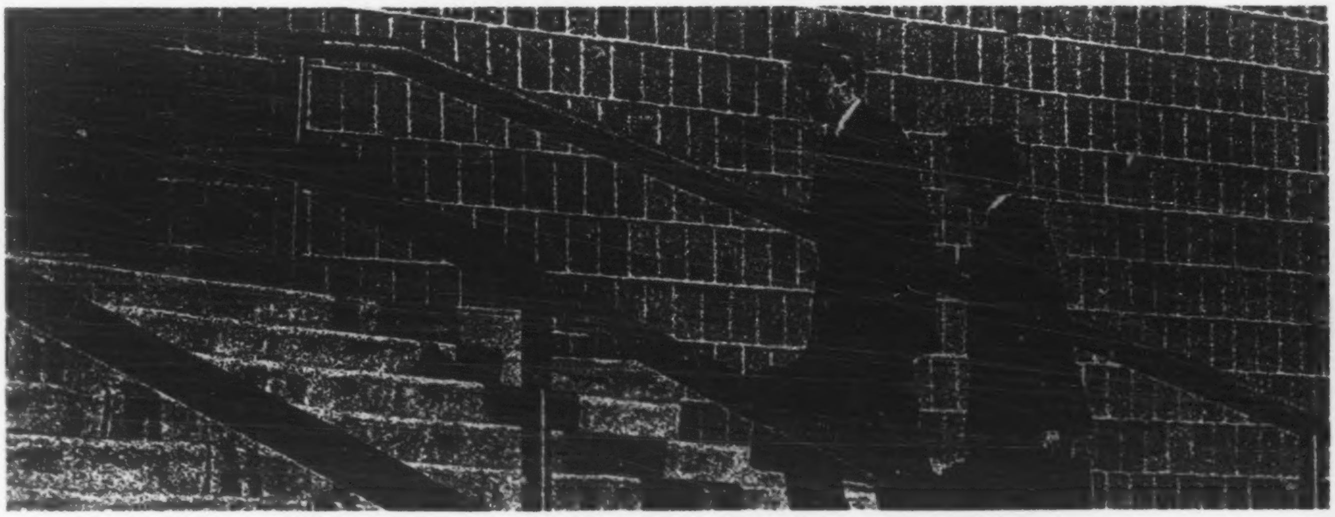

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ECUs

Continued from page 1

market-weighted amalgam of 12 currencies, the growing liquidity and the high returns given what they say is a modest level of currency and interest rate risk.

If the first four months of the year are any indication, the young market could top $18 billion by year end.

Corporations increasingly are issuing in ECUs and swapping the proceeds into their home currencies. So far this year, big-name U.S. companies like General Motors Corp., General Electric Co., IBM Corp. and Johnson & Johnson have issued a total of $677 million in the 9-year-old ECU market. Foreign companies, including Toyota Motor Corp., Nippon Telegraph & Telephone and British Gas PLC, also came to market in 1990.

The ECU lets issuers spread liability among a number of currencies, and is stable, trading within a narrow band.

The popularity of the units could intensify if an ECU futures contract begins trading on the French futures exchange later this year, as many participants expect.

Investors also are bullish on ECUs because they think it would be the currency of choice if Europe achieves monetary union after 1992.

ECU issuance tripled to $12 billion in 1989 from $3 billion in 1984. Through May 17, U.S. corporations alone issued $677 million, surpassing their issuance in all other foreign currencies except Swiss francs, said a report by Robert Schwartz, senior financial economist of Merrill Lynch Capital Markets, New York.

In the past month, Julius Baer Investment Management Inc., New York, made its first foray into ECUs, shifting 5% to 10% of its international and global bond accounts managed for pension funds into ECUs and reducing deutsche mark bonds to 6%.

"The German bond market has been suffering the last couple of months. We want exposure in continental Europe, but were overweighting France more than we wanted to. We also didn't want to invest heavily in small markets," said Jay Dirnberger, managing director. "ECU gives you close to a 10% yield for high-quality issues diversified throughout Europe in countries where you otherwise might not invest because of high brokerage costs and logistical problems."

"The ECU market has grown quite a bit in liquidity in recent years. Borrowers used to dictate the terms, but now that the market is more liquid and analyzed more carefully, bonds are priced better," Mr. Dirnberger added.

PCM International, one of the first U.S. institutions to invest in the ECU 18 months ago, is overweighting ECUs vs. deutsche marks.

"The ECU is a stellar performer in a bear market because of the blend of currencies but is doing very well now too. About six very large new issues this year have increased market liquidity," said Susan Tannehill, director-international fixed income of PCM, Newark, N.J. PCM manages $370 million in international bonds for Prudential-Bache Securities Inc.'s mutual funds and $1.1 billion in foreign fixed-income accounts for pension clients.

Ms. Tannehill says the ECU offers relatively good value across all maturities, and has been gaining worldwide investor appeal in the past six months.

"It's a diversified basket — ideal for international portfolios with less currency risk than the individual currencies," she said.

The ECU is not right for all investors. Richard Carr, managing partner of Brinson Partners Inc., Chicago, said the firm prefers buying directly in foreign currency markets rather "than using a cocktail like the ECU." But the firm wouldn't rule out future ECU investment.

In March, General Motors, Detroit, issued $100 million of 11.25% ECU bonds due April 19, 1994. Proceeds of the issue, which was priced at 101.625%, will be used for general corporate purposes and to retire long-term debt maturing next year.

"We tap that market periodically — more so recently. We're just taking advantage of low-cost opportunities in any of the Euromarkets," said Walter Borst, manager-capital markets.

Mr. Borst declined to say whether the ECU issue was swapped, but noted "we do actively manage our liabilities."

Johnson & Johnson, New Brunswick, N.J., also tapped the ECU market earlier this year after issuing ECUs for the first time in January 1989.

"From time to time it is advantageous to float foreign notes and swap them into U.S. dollars, which has the effect of lowering interest costs on borrowings," said Jeff Leebaw, a company spokesman. He added the issue functioned as a substitute for commercial paper that otherwise would have to be issued.

The ECU market is a bright spot in a backdrop of dwindling U.S. corporate issuance of Eurobonds. Many issuers are finding ECUs more attractive than U.S. or Canadian dollars or sterling.

Last year it was the biggest relative gainer in the non-dollar segment of the Eurobond market. U.S. corporations issued more than $2.25 billion of ECU-denominated bonds in 1989 despite a drop in the second half of the year. That total was almost twice the $1.3 billion issued in 1988 and a far cry from 1987's $500 million in new issues by U.S. corporations.

But U.S. issuers sharply reduced their issuance of Eurobonds in general in the first quarter, reflecting reduced demand for credit and a narrowing of differentials between U.S. and foreign interest rates, according to the Merrill Lynch report. In the first three months of the year, U.S. companies issued $3.3 billion of Eurobonds — the smallest volume since the fourth quarter 1987, when the stock market collapse slashed the total to $1.48 billion.

The ECU has no central bank to support it, but a lot of European central banks have been issuing ECUs and keeping the proceeds in their currency reserves to use as they would dollars to manage fluctuations of their home currency. And the ECU is widely regarded as the most politically palatable candidate for a single European currency. ■

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AT DEADLINE

Funding level boost aired

Rep. Peter J. Visclosky said he will introduce legislation to boost permissible funding levels for younger defined benefit plans to encourage creation of new plans and improve the health of existing plans.

His proposal will establish a sliding scale for the full-funding limit, based on a fund's projected benefit obligation. To offset any tax losses, he would increase the excise tax on reversions to 24% from 15%.

Aetna changes withdrawal

Aetna Capital Management now will give clients withdrawing from three of its commingled real estate funds a pro rata share of their investment. Previously, withdrawal requests were handled on a first-come, first-served basis. In addition, Aetna adopted an incentive-fee plan for its $1.7 billion Real Estate Equity Fund.

Ameritech names new exec

John E. Rooney Jr. has been named vice president and treasurer of American Information Technologies Corp., succeeding Carl G. Koch, who will retire Aug. 1. Mr. Rooney had been senior vice president and general manager of Mastercare Auto Service Centers, part of Bridgestone Firestone Inc.

Changing lineups

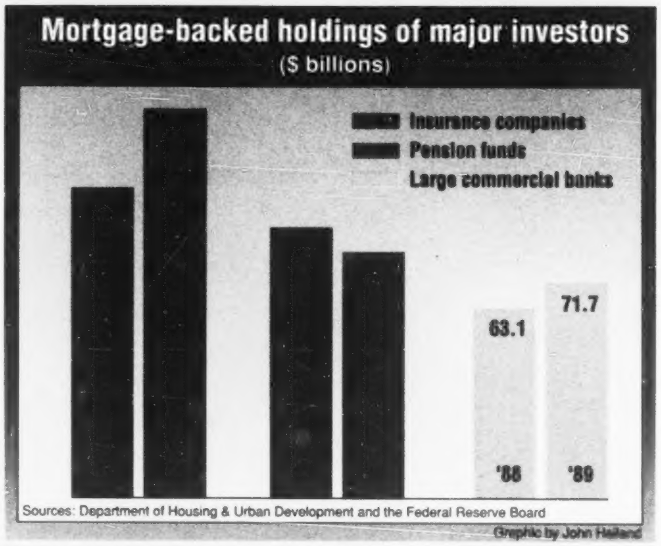
The $7.8 billion Shell Oil pension fund hired Hill Samuel/Investment Advisers Ltd. to run $50 million in a European-only equity portfolio . . . The $263 million Anne Arundel County Retirement Systems picked Bankers Trust Co. and BEA Associates Inc. to run active international equity accounts of $20 million and $5 million, respectively . . . The $210 million U.S. Army Non-Appropriated Fund Employee Retirement Trust hired Globe Finlay Inc. to manage $20 million in international equities . . . Viacom International Inc. tapped BEA to handle $10 million in fixed income . . . The $70 million Iron Workers Insurance and Pension Plan hired Daniel S. Kampel Associates Inc. to manage a $10 million balanced account . . . Refco Capital Trading Co. hired BEA for a $25 million enhanced low-risk arbitrage account, and the Hospital of St. Raphael hired BEA for a $50 million balanced account.

Consultant changes made

The $1.8 billion City of Philadelphia Pension Fund has recommended The Townsend Group to replace MIG Realty Advisors as its real estate consultant. A decision was to be made late last week . . . The $770 million Milwaukee County Employees Retirement System hired the Chicago office of William M. Mercer Asset Planning Inc. as consultant, replacing Prudential-Bache Securities Inc.

Mortgage-backed holdings of major investors

($ billions)



Sources: Department of Housing & Urban Development and the Federal Reserve Board

Graphic by John Halland

Mortgage securities lure insurers, banks

By Leonard J. Hollie

With corporate bonds tarnished and other fixed-income investments yielding lower returns, insurance companies and large commercial banks have nearly doubled their holdings of mortgage-backed securities to $210 billion.

But stepped-up efforts to sell more pension funds on mortgage-backed securities haven't lured them in great numbers into the $1 trillion market.

Insurance companies held $130.2 billion in mortgage-backed securities at year-end 1989, a 26.4% increase from 1988, according to the U.S. Department of Housing and Urban Development, Washington. Mortgage-backed securities accounted for 10% of insurance companies' portfolio

See **MBS market** *on page 50*

A benefits bonanza

Employees offered annuity and lump sum

By Hillary Durgin

WASHINGTON — The National Telephone Cooperative Association is amending its $340 million plan with an innovative twist allowing employees to receive their retirement benefits in a combination of a lump sum and an annuity.

The new program is expected to be cost neutral initially, but eventually could save the NTCA money. NTCA officials hope the amount of assets flowing out of the plan will decrease since participants now will be allowed to take some money in a lump sum and some in an annuity. If less money is withdrawn in lump sums, there will be more money remaining in the plan to earn investment income.

Previously, participants could take a lump sum or an annuity, but not both.

"One reason we keep giving people more flexibility with annuities is to lessen the lump sums," said Scott Gildner, consulting actuary with The Wyatt Co., Washington, NTCA's actuary. "It is a drain. It is easier to invest for the long run if people take annuities."

Under the new flexible pension plan — possibly the first of its kind — employees would be able to design their own retirement benefit. The employer would specify the limits for each benefit.

For example, given a hypothetical limit of a $100,000 lump sum and a $10,000 annual annuity, a participant could elect a lump sum of $46,000 and the remainder as an annuity, or an annuity of $6,000 and the remainder as a lump sum.

About one-third of the Fortune 1000 companies offer plan participants the option of cashing out their retirement benefits in a lump-sum distribution, said Mr. Gildner. He added, however, virtually no companies give participants the option to receive benefit payments in a combination lump-sum/annuity format.

With the lone exception of PepsiCo Inc., Purchase, N.Y., "I've never seen the combination," Mr. Gildner said. "I don't know of anyone who says, 'Within boun-

See **Bonanza** *on page 47*

Package trades go international

Funds cut foreign costs by up to 33%

By Margaret Price

U.S. pension funds increasingly are trying to cut the costs of international investing through package trading, or the buying and selling of complete portfolios.

Among the players are Unisys Corp., American Information Technologies Corp., General Electric Co. and Household International Inc.

Package trading has many names, including program trading (not to be confused with the arbitrage-based investment strategy), block trading and portfolio restructuring. And while the technique most often is used in purchasing U.S. securities, its use in foreign markets is growing, largely because overseas investing is more costly.

Commissions on foreign equity trades can be five to 10 times as much as those on domestic stock trades, noted John Stimpson, a principal at Morgan Stanley & Co. Inc., New York. But with a package trade, investors can expect to save roughly one-third of the normal total cost of executing the individual trades, he said.

Some pension funds use package trading to make their first international investments or to expand their holdings; others do so to shift money among investment managers or asset classes.

T. Britton Harris, managing director of pension management worldwide for ABB Asea Brown Boveri in White Plains, N.Y., said his fund's package trade purchase of $20 million of foreign stocks last year saved at least one-third of the cost normally incurred (*Pensions & Investments*, Sept. 4).

The fund, which at the time was Combustion Engineering Inc., used Morgan Stanley to handle the trade. Mr. Harris said he expects to execute more package trades this year.

Pension fund executives like the technique because they can negotiate, with brokers, favorable terms for the deals, such as guaranteeing purchase prices of desired stocks. And because international block trades take only a few days to complete, investors also might capture appreciation of rising markets more rapidly than if a package of stocks were bought slowly and in piecemeal.

But, "if a market goes down during the month investors bought stocks" in a big block, the investment costs would be higher than if the investor bought them a little at a time, said Allan Emkin, managing director at Pension Consulting Alliance, Glendale, Calif.

Market impact can be another concern. Some investors advise scrutinizing brokers' executions to be sure the package trade didn't trigger sharp price swings or other problems.

Still, international package trading is catching on. "This area has really taken off" since last year, said Morgan Stanley's Mr. Stimpson. He said his firm this year has seen at least 10 U.S. pension funds — including "several of the top 10 Fortune 500 companies" — investing "in excess of

See **Package** *on page 49*

Mining for U.S. capital

Atlas Copco, a Swedish manufacturing company, used Rule 144A to obtain financing from U.S. investors. Other foreign companies are following suit. Complete details on page 6.

NEWS DIGEST

A wire transfer proposal, clarifying terms and liabilities of the transactions, has been sent to the states for approval. Page 12.

The concentration of assets among the largest money managers could stifle the creativity often found in smaller organizations. Opinion, Page 14.

Defined benefit plan formation hit a low in 1989 when, not coincidentally, many recent tax law changes took effect. Commentary, Page 16.

Investment management software packages are the subject of a new column that makes its debut in this issue. Page 18.

Supporters of dynamic hedging rally to the defense of the oft-criticized strategy, saying it lowers risk and adds liquidity. Page 19.

A short-term trading tax, as proposed by Sens. Nancy Kassebaum and Robert Dole, would reduce the market's role as a guide to a company's prospects. Page 44.

Two Sanford Bernstein analysts predict an era of heightened competition, as managers cope with slower asset growth. Page 46.

The state of Alaska is seeking outside investors for a state-sponsored venture capital fund. Page 49.

SPECIAL REPORT: INTERNATIONAL

The global arena is one of the hottest topics among investors these days. In this issue, *Pensions & Investments* profiles the top 50 international and the top 50 global managers, as well as ranks the world's 300 largest pension plans, with a more in-depth view of 25 of the biggest non-U.S. funds. Page 21.

FINANCING

The success of Atlas Copco's $200 million worldwide equity issue has bankers scurrying to complete similar deals in order to capitalize on investor interest. Page 6.

INTERNATIONAL

U.S. pension funds are using a domestic technique — package trades — to reduce the cost of foreign investing and facilitate asset shifts. Page 1.

REAL ESTATE

The Algemeen Burgerlijk Pensioenfonds' venture with Ameritech's pension fund is but one of many realty deals the Dutch fund has planned. Page 3.

The Texas Teachers system is looking for a joint venture partner for $200 million it wants to invest in the participating debt of European property. Page 4.

Realty return measures showing low volatility relative to stock and bonds are understandable given the asset's two components. Page 43.

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Real estate survey under way

Questionnaires for *Pensions & Investments'* annual survey of real estate investment advisers will be mailed this week. The deadline for returning questionnaires is July 29; the survey will be published Sept. 3. If you qualify and do not receive a questionnaire soon, or have questions about the survey, please contact Christine Philip, directory coordinator, at (312) 649-5217.

High court spares PBGC

LTV ruling restores plans, affirms agency's authority

By Barry B. Burr

WASHINGTON — The Pension Benefit Guaranty Corp. sees little chance of The LTV Corp. trying to reterminate its pension plans after a Supreme Court ruling vindicated the federal agency on restoring the company's plans.

In addition, the decision reduces the need for the PBGC to seek a premium rate hike from employers.

Because LTV is "very healthy right now," James B. Lockhart III, PBGC executive director, doesn't see "any possibility" of LTV reterminating to avoid funding some $2.5 billion in liabilities.

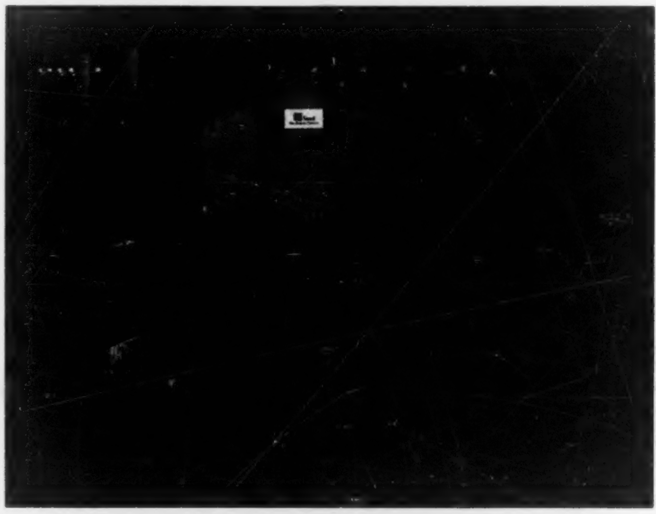
Photo by Douglas Konkol

LTV must find a way to pay for three underfunded, steel-related pension plans, the Supreme Court ruled.

LTV "has $1 billion in cash and a healthy cash flow. It's recovering; the steel industry is turning around," Mr. Lockhart said. That assessment is based in part on a financial report prepared by Salomon Brothers Inc., New York, to help the PBGC analyze LTV.

Mr. Lockhart noted the financial stress test for LTV to apply for retermination "is pretty tough. It's pretty much a liquidation test."

For LTV to reterminate its plans, he said the company would either have to be in Chapter 7 bankruptcy liquidation proceedings, or threatened with being pushed into Chapter 7 unless relieved of financially ruinous pension liabilities.

An LTV spokesman said the company, which is still in Chapter 11 reorganization, doesn't have the money to fund the liabilities of the three steel-related pension plans the PBGC is returning to the Dallas-based diversified steel, aerospace and energy company.

LTV's options "could range from negotiating with the PBGC to trying to reterminate," said James Bowman, manager-financial communications. "A decision hasn't been made on what to do."

The PBGC, Mr. Bowman added, has "never recognized the fact that we haven't paid any interest

See **LTV ruling** *on page 47*

'50s data meets '90s computers

Dedicated stocks get mixed reviews

By Curtis Vosti

Revolutionary or evolutionary?

Those who tout it — Bob Haugen, professor at the University of California-Irvine and director of AG Risk Management, also in Irvine, and officials of National Investment Services of America Inc., Milwaukee — say the concept of dedicated stock portfolios is revolutionary.

These dedicated stock portfolios are different from dedicated bond portfolios, which structure fixed-income assets to pay off at the same time and amount as maturing liabilities. The stock portfolios Mr. Haugen and the folks at NISA talk about primarily are dedicated to risk management.

They say the strategy offers the same or better returns for less risk than the market or better returns for the same risk, and can be structured to limit pension liabilities from the effects of inflation or interest rates.

"The 1990s are going to be the decade of risk management for equity portfolios," Mr. Haugen says. NISA for a year has been managing $50 million under these strategies for three pension funds the firm wouldn't name.

Some investment professionals who have listened to Mr. Haugen's presentation say he didn't give enough details to judge the system fully. They say the techniques sound similar to those already in use by others.

The system is not revolutionary, they say; it is evolutionary, if that. And as can be expected, there are others at work on variations of the same theme.

But there are those who have been impressed with what they've seen. Roger Bransford, national director of asset consulting at TPF&C in Atlanta, is one who sees the strategy having value for pension executives wrestling with FASB 87.

The criticisms do not bother Mr. Haugen, who dismisses them as based on, perhaps, professional jealousy and definitely on misconceived notions of risk.

As first structured in the seminal risk/return studies by Harry Markowitz in 1952, the concept of risk among stocks in a portfolio has grown, Mr. Haugen said, but in the process has changed for the worse.

As scholars have analyzed asset

See **Dedicated stocks** *on page 49*

Search underscores obstacles

By Trudy Ring

The $57 billion California Public Employees' Retirement System's decision to redo its emerging manager search illustrates the difficulty new, small or minority-owned firms encounter in trying to crack the institutional investment market.

The fund's board has voted to interview all 85 firms that were accepted for review in its search that was designed to open up opportunities to newer and smaller firms, especially firms owned by minority groups and women (*Pensions & Investments*, Dec. 11).

None of the 29 finalist firms was owned by blacks, although 10 were owned by minorities and women.

Charles Valdes, chairman of the California Employees' investment committee, said the staff apparently penalized some firms for being too large or growing too fast — issues that never were presented to the board. The firms had to have at least $20 million under management — reduced from the system's usual $500 million minimum — but there was supposed to be no upper limit, he said.

He called the results "discrimination by misapplication of the rules," and noted black-owned firms that made the finals in a search by the California State Teachers' Retirement System were rejected by the public employees' system.

Those firms are Brown Capital Management Inc., Baltimore; WR Lazard & Co., New York; and NCM Capital Management Group Inc., Durham, N.C., confirmed DeWitt Bowman, chief investment officer at the public employees' system. WR Lazard, with about $1.7 billion under management, was disqualified for being too big, he said; the other firms were among the 85 reviewed, but did not make the final 29.

Mr. Bowman said there was an upper limit on the assets a firm could manage, and this ceiling

See **Search** *on page 50*

GE Investments

Worldwide Diversified Money Management Services

Exploring Europe

Texas Teachers seeking realty partner

By Terry Williams

AUSTIN, Texas — The $23.3 billion Teacher Retirement System of Texas is considering a joint venture in European real estate debt with a European pension fund.

The initial investment would be about $200 million — about 10% of the fund's real estate allocation — and would be participating debt, primarily in office buildings, said Owen A. Reischman, investment officer-real estate.

Fund officials so far have talked with one European pension fund but have not yet establishe an arrangement, he said.

He declined to identify the pension fund or its nationality. Whe asked, however, if it were a British or Dutch fund, he replied, "i could be possible."

Mr. Reischman characterize the search for a European joint venture partner as in the "incubation stage." It hasn't been addressed by the retirement system' trustees, he said.

Texas Teachers' investment officers began to consider foreig real estate investment last year.

"Our fund, as a whole, needs t be thinking about global investing," he said.

"The events in Eastern Europ have brought everyone to the realization that global investing wil be here a lot quicker than we anticipated."

Joint ventures are not new. European pension funds for year have invested in U.S. real estat through joint ventures with domestic real estate money managers, according to Jake Young, consultant with Roulac Real Estate Consulting Group, Chicago.

But Texas Teachers' intentio to establish a joint venture with European fund to invest in rea estate overseas is a new twist, h said.

Mr. Young knows of no othe U.S. pension funds planning t invest in European real estat through a joint venture with European pension fund.

To date, most U.S. pension fun investment in foreign real estat has been through domestic rea estate investment managers suc as JMB Institutional Realty Corp or foreign realty companies.

More recently, investment managers (such as Jones Lang Wootton Realty Advisors, Equitabl Real Estate Investment Management Inc., Fiduciary Trust Co. International and The Yarmout Group) have begun to develo commingled funds to invest in European real estate.

But Mr. Reischman prefers joint venture with a foreign pension fund.

"We think the experience level of foreign pension funds ar vastly superior to the advisers i the United States," he said. "The have had long histories of dealin with properties in Europe (and are better suited."

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CORRECTIONS & CLARIFICATIONS

• In the May 21 issue on th largest money managers:

Fiske Capital Managemen was represented incorrectly in th rankings with $10 million in tax-exempt assets.

Fiske has $40 million, making i No. 856.

Lehndorff & Babson Real Estate Counsel was listed incorrectly on the chart on page 71 The firm manages $781 million i discretionary assets and $1.104 billion in non-discretionary asset for U.S. institutional tax-exemp clients.

No assets are assigned to othe firms.

John Hancock Financial Services misreported total assets an total discretionary assets unde management. The correct figure for each category is $46.948 billion.

CASH MANAGEMENT

States to decide on wire proposal

■ A proposed statute clarifying the terms and limits of damages involved with late or improperly executed wire transfers has been submitted to the states for approval.

So far, Virginia, West Virginia and Utah have approved proposed article 4A to the Uniform Commercial Code pertaining to electronic funds transfers. Texas, California, Washington, Virginia and Illinois are expected to consider it later this year, but the bulk of state legislatures aren't expected to deal with it until 1991. States have the option of adopting, rejecting or modifying the proposal. If rejected, the proposal does not apply in the state.

The statute, in the works since 1985, was prepared by the National Conference of Commissioners on Uniform State Laws with help from the banking industry, the American Bar Association and the National Corporate Cash Management Association.

Nina Nodge is cash manager for Weatherford International Inc., Houston, and head of an ad hoc committee of the NCCMA involved with article 4A. She said the final measure clarifies the responsibilities for banks and corporate treasurers.

She advised corporate cash managers to "find ways to leave tracks on who is responsible for wire transfers. If there are problems, the corporation must prove it was not at fault."

If there are errors in wire transfers, corporations will have up to 90 days to report to the bank, under the proposal. Banks will have until the open of business the following day to notify corporations of the acceptance or rejection of a wire transfer.

Bank exposure to highly leveraged transactions (HLTs)

Bank	HLTs outstanding ($ millions)	HLTs outstanding as % of loans	Non-performing HLTs as % of loans	Total HLT exposure as % of common equity
Continental Bank	$2,900	18.6%	1.2%	392%
Bank of Boston	5,328	21.2	4.2	379
Wells Fargo	4,200	10.1	3.8	395
Bankers Trust	3,400	16.1	9.2	295
Bank of New York	4,178	11.4	2.3	249

Source: Oppenheimer & Co. Inc., from company financial statements.

BANKS

HLT exposure coming to the fore

■ About $1.75 billion of the more than $54 billion in outstanding loans from the nation's top commercial banks for highly leveraged transactions are classified as non-performing assets.

And Oppenheimer & Co. Inc., New York, looks for NPAs to rise.

When you add in commitments not yet funded and subordinated debt and equity out on those transactions, total HLT exposure (such as leveraged buy-outs and recapitalizations) of the major banks amounts to $85.5 billion.

Citicorp leads with total HLT exposure of $12.3 billion, followed by Bank of Boston with $7.2 billion. Bankers Trust Co., Citicorp and BankAmerica had the highest NPAs as a percentage of HLT loans.

Oppenheimer said anticipated deterioration in HLT credit quality is becoming visible in rising non-performing assets. Although only 3.2% of large bank HLTs were on NPA status in 1989, Oppenheimer expects a big increase in the first quarter and more through the year.

The data assembled by Oppenheimer came from 1989 annual reports. The reports for the first time spelled out bank exposure to highly leveraged transactions using a uniform definition provided by regulators.

WASHINGTON

SEC's McGrath seeks top dollar

K. McGrath

■ After 16 years at the Securities and Exchange Commission — including the last seven as director of its division of investment management — why is Kathryn B. McGrath leaving the SEC?

"Money," Ms. McGrath explained.

"I've got to leave, or I'll be an old lady limping along on a Social Security check."

The federal government's top salary for civil servants is $83,600. Although Ms. McGrath does not expect to become rich with her new employer — the prestigious law firm of Morgan, Lewis & Bockius — she will be paid considerably more as a partner there.

She also will be able to drive in to work at 10 Monday mornings from her home in Luray, Va., located snug in the Blue Ridge Mountains, without having to be docked for an hour of vacation time.

She starts her new job July 1.

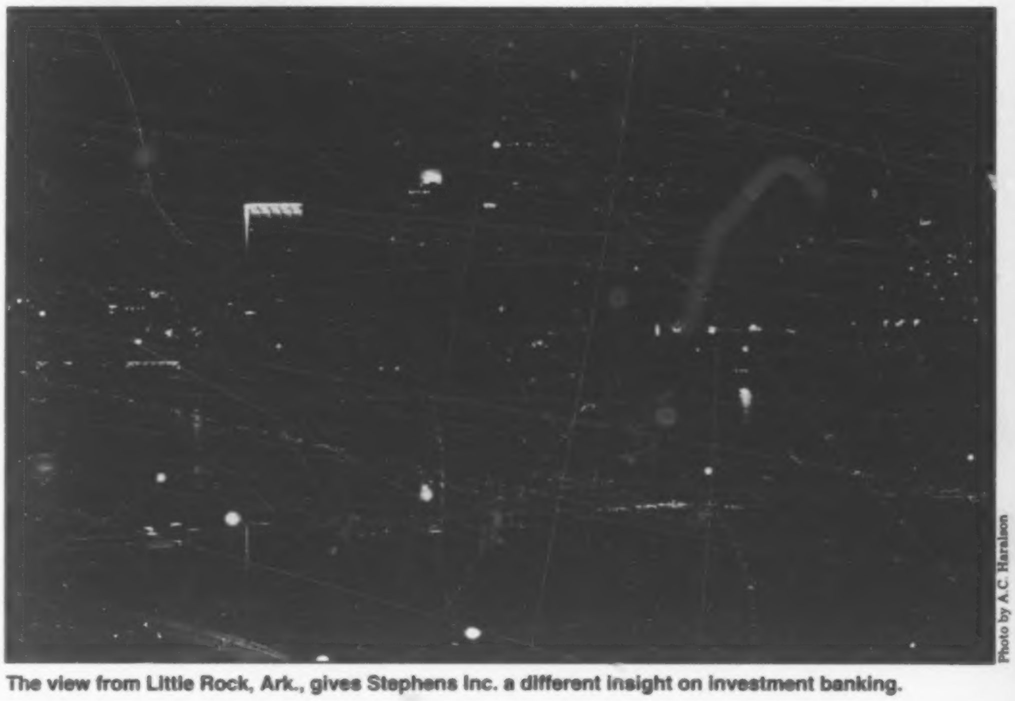


Photo by A.C. Haralson

The view from Little Rock, Ark., gives Stephens Inc. a different insight on investment banking.

INVESTMENT BANKING

Stephens is happy to be located off the beaten path

■ From its Little Rock, Ark., office, Stephens Inc. has a unique perspective on investment banking and dealmaking.

Stephens, a 40-year-old family owned full-line investment bank, sees upturn, growth and opportunity in the underserved Southeast, Southwest and Midwest. Dale Dawson, managing director, says Stephens' Little Rock headquarters is conveniently situated to all three regions. Plus, there are few other well-capitalized investment banks to compete with it.

Unlike its larger Wall Street competitors, Stephens has been expanding its corporate finance, advisory and merger and acquisition activities.

Proud of its relationship orientation, the firm just hired three former Wall Street executives, and soon will open its first office outside Little Rock (in Houston).

Stephens long has been active in the energy and retailing industries, two industries it views as being ripe for investment banking services. Clients include Tyson Foods Inc., Alltell Corp., Wal-Mart Stores Inc., Arkla Inc. and JB Hunt Transport Services.

Newly named Managing Director Gerald Bodzy will head the Houston office. He has years of experience with Texas companies, and was managing director in Smith Barney, Harris Upham & Co.'s corporate finance division. Associates Michael Ames and Gene Shepherd, who each had the same title in Merrill Lynch, Pierce, Fenner & Smith Inc.'s Houston office, will join him.

CORPORATIONS

Playboy's dual-class recapitalization draws bankers

■ With Hugh Hefner's muscle, Playboy Enterprises Inc. had little trouble winning approval of its proposed dual-class recapitalization earlier this month.

Christie Hefner, chairman and chief executive officer, said she needed financing flexibility for acquisitions, new equity, employee benefits and the improved liquidity that would result. Playboy is among the first New York Stock Exchange-listed companies to propose such a recap under a new rule allowing companies with dual-class voting structures to list.

Investment bankers already are knocking on Playboy's door. But institutional investors probably won't be as eager: They own little Playboy stock now and generally oppose dual-class recapitalizations that eliminate voting rights for one class of stock.

Playboy's dual-class recap includes a one-for-two reverse split of the company's shares and an increase in the number of shares authorized to 37.5 million (from 15 million), consisting of 7.5 million shares of Class A stock and 30 million shares of Class B stock with no voting rights.

Executives of the company came up with the plan because Mr. Hefner, Playboy's founder and chairman emeritus, didn't want to give up his controlling block of stock. Ms. Hefner, however, wanted the flexibility to issue stock without diluting her father's voting power.

INTERNATIONAL

Convenants are more common in U.K. bond issues

■ More British companies are putting event risk covenants in their bond issues even though takeovers are less of a threat than in the United States.

Recent public debt offerings by BAT Industries PLC, Boots Co. PLC, J. Sainsbury PLC, Ratners PLC and Reed International PLC contained event risk covenants.

Unlike the United States, event risk protection is unusual in the United Kingdom. British investors haven't clamored for protection from sudden drops in corporate credit quality.

Standard & Poor's Corp. says the current high level of U.K. interest rates and the well-chronicled problems in the U.S. high-yield market have reinforced the cautious sentiment in Britain and reducing event risk. But the rating agency says lower interest rates and depressed share prices could provide "tempting opportunities for a more aggressive wave of leveraged takeover activity in the U.K." And investors are right to be concerned.

"Although event risk hurdles in the U.K. are somewhat higher and greater in number, they can be overcome. As a result, holders of U.K. corporate debt face the threat of event risk, and to the extent that financial practices within the U.K. become more aggressive in years to come, the likelihood of event risk can become more pronounced," S&P said in a report.

Global push stays strong

Largest investment firms managing 60% more assets

By Curtis Vosti

The American institutional plunge into international/global investing continues, as the top 50 managers reported a growth of 38% in assets under management for the year ended March 31.

For the second year in a row, *Pensions & Investments'* annual survey of international money managers shows the growth in global mandates — those that allow investments in the United States — was greater than that of pure international, which exclude U.S. investment.

The assets managed under international mandates, however, still exceed those for global investing by more than 2 to 1.

Assets under management by the top 50 firms, ranked by international and global accounts combined, jumped to $83.211 billion from $60.263 billion reported a year earlier.

Separately, the top 50 global firms increased by 60.4% their assets under management for the year ended March 31, to $25.319 billion, while assets of the top 50 international managers increased 29.6%, to $61.86 billion.

In some cases, the largest global or international managers were not among the top managers ranked by combined assets.

The overall increase is all the more indicative of a deeper commitment from institutional investors because market returns added little, if any, to the growth in assets.

The Morgan Stanley Capital International Europe Australia and Far East Index returned −11.35% for the year ended March 31, while the MSCI World Index returned −1.76%.

For the same time period, the Salomon Brothers World Bond Index returned 3.15%.

Brinson Partners Inc., Chicago, showed the biggest percentage increase — 132.5% to $6.819 billion — of any of the top 50 managers of combined international/global assets.

Managing partner Richard Carr said the tremendous growth was fueled by many new clients as well as existing clients changing the portfolio mandates to global from either domestic or international or a combination of the two.

"We see people continuing to show interest in international, but we see a higher proportion wanting to do so on a global basis," Mr. Carr said.

"The people who want to do it globally realize a lot of value can be added by being able to move money back and forth (between overseas and the U.S.) at appropriate times."

The firm increased its global mandates 479.9% from a year earlier. Its international mandates grew a scant 0.6%. New clients included the Illinois Municipal Retirement Fund, the Wisconsin State Board of Investments and the California Public Employees' Retirement System.

Bobbie Parkhill, a principal at the consulting firm Ennis, Knupp & Associates, Chicago, sees the increased interest in globalization as a sign of a broader understanding of world markets.

"I think the larger and sophisticated clients are moving in that direction," she said. "And some of the smaller clients are, too.

"They have to stop thinking of the equities (U.S.and non-U.S.) as two separate asset classes and start thinking of them as just equities."

Mandates for equity investments among the top 50 international/global managers increased 33.9% from a year earlier. Fixed-income investments from among the top 50 grew 25.4% from a year ago.

Also, $4.972 billion was reported in balanced accounts.

Brinson Partners ranked second to State Street Bank and Trust Co., Boston, in total international and global assets under management.

It was the fourth year in a row State Street has led the survey. Its assets under management in international and global accounts combined increased 41% to $7.874 billion, from $5.584 billion a year ago.

According to Larry L. Martin, vice president at State Street, clients are branching out beyond the traditional capitalization-weighted passive vehicles as they gain familiarity with international investing.

"We're seeing more non-capitalization-weighted strategies, more active/passive strategies, more enhanced passive/active and more active/active strategies," he said. "I call it a sign of comfort."

The top 50 firms categorized 85.9% of the assets as "actively" managed, which Mr. Martin said reflects current trends.

"People saw that the median active manager beat the index and they think that maybe it goes in cycles," said Mr. Martin. "They associate passive investing with a full Japan weighting."

Christopher Nowakowski, president and founder of InterSec Research Corp., Stamford, Conn., is cryptic about the effect of his firm's survey indicating active managers beat the indexes.

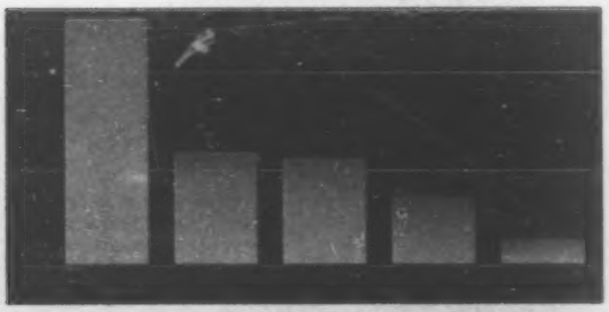
"Pension funds are particularly expert at going forward by looking through a rear-view mirror," he said. "All of a sudden, everyone thinks active is the place to be."

Ennis Knupp's Ms. Parkhill, however, says pension funds are learning active management has its merits apart from beating the indexes.

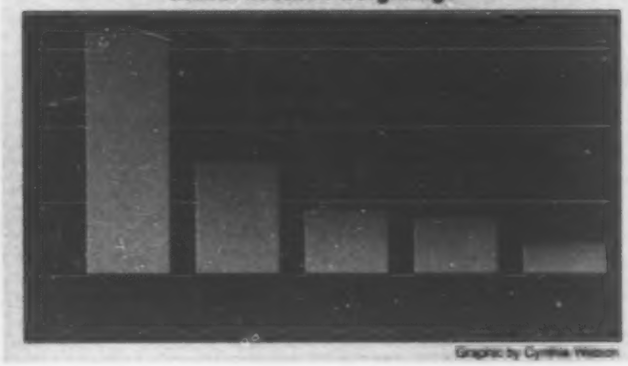
See **Global** *on page 28*

Japan, U.S. top equity draws*

International account weightings



Global account weightings



Graphic by Cynthia Watson

In this issue's special report, *Pensions & Investments* takes a look at the international investment market.

First, we profile 25 of the largest non-U.S. pension funds in the world, and rank (in a joint project with InterSec Research Corp., Stamford, Conn.) the 300 largest pension funds in the world. Then, we rank more than 100 managers of international and global accounts for U.S. tax-exempt institutional clients, running profiles on the firms ranking in the top 50 of each universe.

P&I's international reporters — Margaret Price and Curtis Vosti — compiled the information on the 25 pension funds from a variety of sources.

InterSec's listing of non-U.S. pension funds was the starting point. Pension executives then were asked to complete a questionnaire, used to write the profiles beginning on page 22.

Additional information was gathered through the assistance of Alan Philipp Information Services Ltd., London, publishers of Pension Funds and Their Advisers, 1990; CPF Publishing Inc., Toronto; and the Japan Bond Research Institute, The Institute of Investment Technology at Nikko Research Center Ltd. and Japan Pension Fund Association, all of Tokyo.

Pension Funds and Their Advisers is distributed in the United States by Money Market Directories Inc., Charlottesville, Va.

The information on the investment management firms was compiled from questionnaires.

The manager profiles and charts begin on page 28.

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P&I/InterSec World 300 (U.S. $ mils.)

1.	TIAA-CREF	U.S.	81,000
2.	ABP	Netherlands	73,268
3.	California Employees	U.S.	54,000
4.	Public School Teachers	Japan	48,989
5.	New York State & Local	U.S.	44,238
6.	AT&T	U.S.	42,700
7.	New York City	U.S.	41,404
8.	General Motors	U.S.	40,900
9.	Nat'l Gov't Employees	Japan	38,280
10.	Caisse de Depot	Canada	32,300
11.	California Teachers	U.S.	30,335
12.	Rover Group	U.K.	30,000
13.	U.K. Atomic Energy	U.K.	30,000
14.	General Electric	U.S.	28,912
15.	Pension Welfare Service	Japan	28,656
16.	New York Teachers	U.S.	28,130
17.	Public Service Super.	Canada	26,400
18.	IBM	U.S.	25,775
19.	New Jersey	U.S.	24,526
20.	Texas Teachers	U.S.	23,500
21.	Ford Motor	U.S.	22,800
22.	British Coal	U.K.	20,982
23.	Wisconsin State Board	U.S.	20,033
24.	British Telecom	U.K.	19,826
25.	PGGM	Netherlands	19,287
26.	Ohio Public Employees	U.S.	19,305
27.	Florida State	U.S.	18,700
28.	E.I. du Pont de Nemours	U.S.	18,681
29.	Ohio State Teachers	U.S.	18,050
30.	Michigan Employees	U.S.	17,948
31.	Public Service	Japan	17,389
32.	North Carolina	U.S.	16,791
33.	NYNEX	U.S.	16,062
34.	Pa. Public Schools	U.S.	15,430
35.	Ameritech	U.S.	14,309
36.	Bell Atlantic	U.S.	13,636
37.	Post Office	U.K.	12,951
38.	University of California	U.S.	12,909
39.	BellSouth	U.S.	12,843
40.	Washington State Board	U.S.	12,669
41.	Electricity Supply	U.K.	12,541
42.	GTE	U.S.	12,425
43.	Minnesota State Board	U.S.	12,343
44.	British Railways	U.K.	12,105
45.	NTT Mutual Aid	Japan	11,630
46.	Pacific Telesis	U.S.	11,443
47.	Oregon Employes	U.S.	11,178
48.	Maryland State	U.S.	11,064
49.	Boeing	U.S.	11,001
50.	Private School	Japan	10,699
51.	Ontario Municipal	Canada	10,621
52.	Pension Fund Assoc.	Japan	10,557
53.	Virginia Supplemental	U.S.	10,244
54.	Police Personnel	Japan	10,349
55.	Agri./Forestry/Fishing	Japan	10,088
56.	Prefectural Gov't	Japan	9,984
57.	B.C. Superannuation	Canada	9,909
58.	Teamsters, Central	U.S.	9,849
59.	USX	U.S.	9,825
60.	U S WEST	U.S.	9,600
61.	British Gas	U.K.	9,519
62.	Pa. State Employees	U.S.	9,504
63.	Eastman Kodak	U.S.	9,500
64.	Philips	Netherlands	9,434
65.	Los Angeles County	U.S.	9,359
66.	Colorado Employees	U.S.	9,227
67.	Barclays Bank	U.K.	9,146
68.	Rockwell Int'l	U.S.	9,124
69.	Teamsters, Western	U.S.	9,084
70.	Lockheed	U.S.	8,926
71.	Georgia Teachers	U.S.	8,908
72.	Illinois Teachers	U.S.	8,475
73.	United Nations	U.S.	8,414
74.	Southwestern Bell	U.S.	8,334
75.	United Technologies	U.S.	8,261
76.	Sears, Roebuck	U.S.	8,101
77.	Universities Super.	U.K.	8,100
78.	Tenn. Consolidated	U.S.	8,075
79.	Imperial Chemicals	U.K.	8,070
80.	Exxon	U.S.	8,066
81.	Connecticut Trust Funds	U.S.	7,996
82.	NSW State Board	Australia	7,938
83.	Alabama Retirement	U.S.	7,884
84.	Shell Oil	U.S.	7,840
85.	Arizona State	U.S.	7,612
86.	McDonnell Douglas	U.S.	7,569
87.	British Petroleum	U.K.	7,505
88.	Philip Morris	U.S.	7,470
89.	Shell	Netherlands	7,233
90.	South Carolina	U.S.	7,072
91.	Chevron	U.S.	7,069
92.	Allied-Signal	U.S.	7,000

Listing continues on page 23

INVESTMENT MANAGERS OF FOREIGN EXCHANGE

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Algemeen Burgerlijk Pensioenfonds

	(U.S. $ millions)
Total pension assets	73,268
Asset mix:	
Stocks	2%
Private loans	73.3%
Real estate	5.8%
Other	18.9%

HEERLEEN, Netherlands — The Algemeen Burgerlijk Pensioenfonds had $73.268 billion (U.S.) in assets, according to the 1990 edition of Pension Funds and Their Advisers. Of that amount, 73.3% was in private loans, 18.9% in other fixed income, 5.8% in real estate and 2% in stocks.

M. Snigders is president and chief executive officer.

Barclays Group Pension Fund

	(U.S. $ millions)
Total pension assets	9,146
U.S. stocks	883
U.S. bonds	101
U.S. real estate	238
Indexed assets:	
Domestic stocks	3,073
Foreign stocks	462
Asset mix:	
Domestic stocks	48%
Domestic bonds	5.4%
Cash equivalents	2.9%
Foreign stocks	29.7%
Foreign bonds	1.1%
Domestic real estate	10.3%
Foreign real estate	2.6%

LONDON — The Barclays Group Pension Fund had $9.146 billion (U.S.) in assets as of Dec. 31. Of the total, 77.7% was in stocks, 12.9% was in real estate, 6.5% was in bonds and 2.9% was in cash equivalents.

The fund's money manager is BZW Investment Management, a wholly owned subsidiary of Barclays Bank PLC.

Key personnel overseeing the pension fund are Michael Mawdsley, pensions manager of Barclays Bank.

British Airways Pension Trustees Ltd.

	(U.S. $ millions)
Total pension assets	6,133
U.S. stocks	450
U.S. bonds	100
U.S. real estate	25
Internally managed assets	6,133
Asset mix:	
Domestic stocks	55%
Domestic bonds	3%
Cash equivalents	3%
Foreign stocks	26%
Foreign bonds	3%
Domestic real estate	9%
Foreign real estate	1%

LONDON — British Airways Pension Trustees Ltd. had $6.133 billion (U.S.) in assets as of Dec. 31. Of the total, 81% was in stocks, 6% bonds, 10% real estate and 3% cash.

The fund does not use external managers and does not have an investment consultant.

Key personnel overseeing the pension fund are Charles Woodward, chief executive, and Peter Moon, investment manager.

British Coal Pension Funds

	(U.S. $ millions)
Total pension assets	20,982
U.S. stocks	1,047
U.S. real estate	419
Internally managed assets	20,943
Indexed assets:	
Foreign stocks	209
Asset mix:	
Domestic stocks	48%
Domestic bonds	12%
Cash equivalents	6%
Foreign stocks	17%
Domestic real estate	12%
Foreign real estate	2%
Other	3%

LONDON — The British Coal Pension Funds had $20.982 billion (U.S.) in assets as of Dec. 31. Of the total, 65% is in stocks, 12% in bonds, 14% in real estate, 6% in cash and 3% in venture capital.

The fund does not use external money managers or investment management consultants.

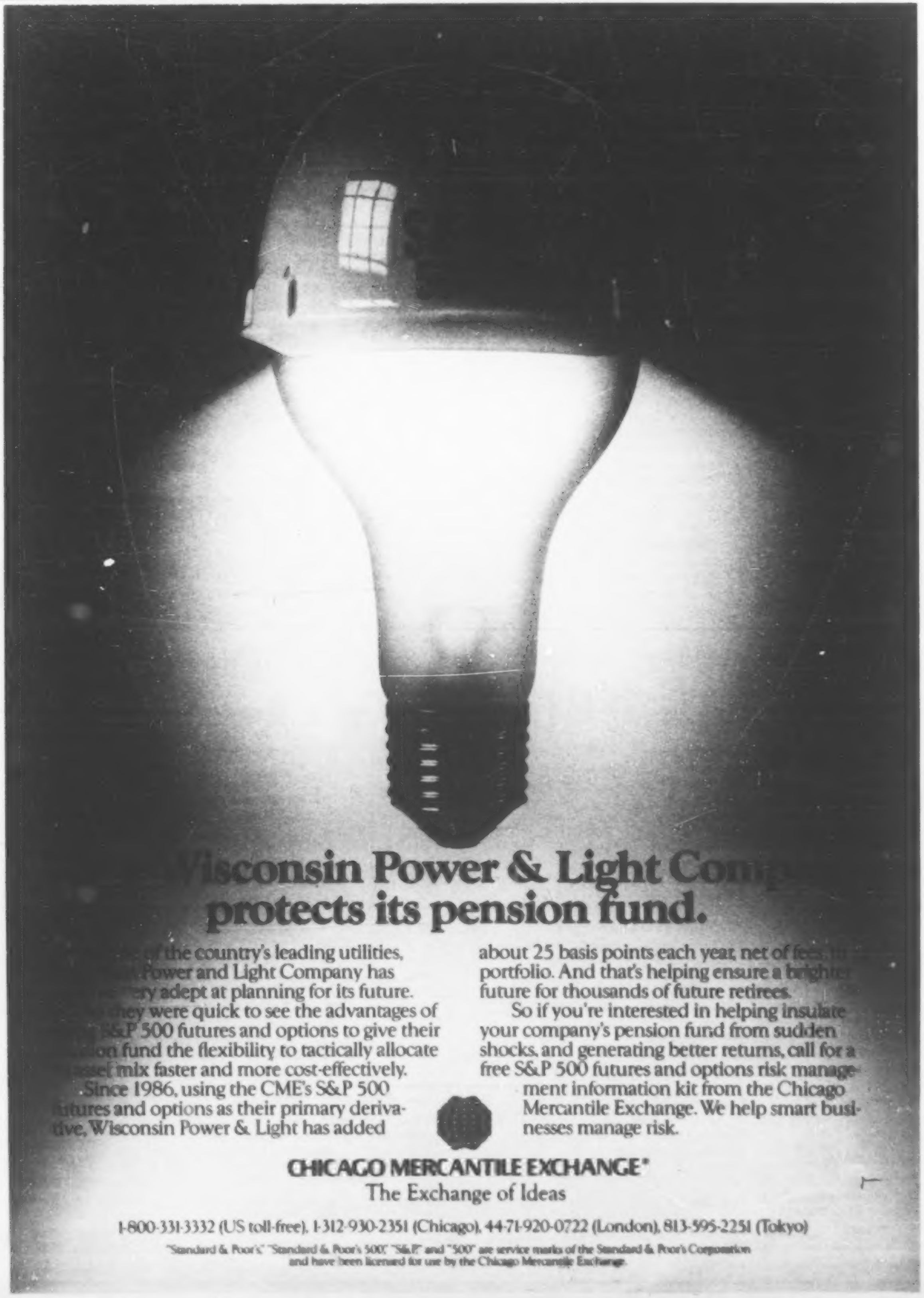
Key personnel overseeing the fund are Paul Whitney, chief executive officer; Barry Southcott, managing director-marketable securities; Robin Hall, managing director-venture capital; and Robert Juddery, managing director-real estate.

British Gas Pension Funds

	(U.S. $ millions)
Total pension assets	9,519
U.S. stocks	495
U.S. real estate	99
Internally managed assets	9,081
Asset mix:	
Domestic stocks	52.4%
Domestic bonds	12.8%
Cash equivalents	6.1%
Foreign stocks	19.4%
Foreign bonds	0.7%
Domestic real estate	7.5%
Foreign real estate	1.1%

LONDON — The British Gas Pension Funds had $9.519 billion (U.S.) in assets as of Dec. 31. Of the total, 71.8% was in stocks, 13.5% in bonds, 8.6% in real estate and 6.1% in cash.

External money managers are: Nomura; Fleming; Weatherall Green &



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Smith; and Stiles Harold Williams. Lazard Investors is the fund's adviser.

Key personnel overseeing the pension fund are Roy Peters, head of pension fund investments, and David Stuart, deputy investment manager.

British Petroleum Pension Fund

	(U.S. $ millions)
Total pension assets	7,505
U.S. stocks	541
U.S. real estate	81
Internally managed assets	7,505
Asset mix:	
Domestic stocks	46%
Domestic bonds	5%
Cash equivalents	4%
Foreign stocks	24%
Domestic real estate	20%
Foreign real estate	1%

LONDON — The British Petroleum Pension Fund had $7.505 billion (U.S.) in assets as of Dec. 31. Of the total, 70% was in stocks, 21% in real estate, 5% in bonds and 4% in cash.

The fund does not use external money managers or investment management consultants.

J.W. Martin is head of investments.

British Rail Pension Trustee Co. Ltd.

	(U.S. $ millions)
Total pension assets	12,105
U.S. stocks	968
U.S. real estate	218
Internally managed assets	300
Asset mix	
Domestic stocks	50%
Domestic bonds	2.5%
Cash equivalents	5%
Foreign stocks	25%
Foreign bonds	2.5%
Domestic real estate	10%
Foreign real estate	2%
Other	3%

LONDON — British Rail Pension Trustee Co. Ltd. had about $12.1 billion (U.S) in assets as of Dec. 31. Of that, 75% was in stocks, 5% in bonds, 12% in real estate, 5% in cash, 2% in venture capital and 1% in art.

External money managers are: Mercury Asset Management; Morgan Grenfell Investment Services Ltd.; Phillips & Drew Fund Management Ltd.; Prudential Assurance Co. Ltd.; and Robert Fleming Holdings Ltd., all of London.

The fund considers asset allocation decisions and money manager selections to be internal functions.

Key personnel are Maurice Stonefrost, chief executive, and David Adams, finance director.

British Steel PLC Pension Schemes

	(U.S. $ millions)
Total pension assets	6,530
Asset mix:	
Domestic stocks	52.1%
Domestic bonds	11.1%
Cash equivalents	4%
Foreign stocks	15.3%
Domestic real estate	13.3%
Other	4.2%

LONDON — British Steel PLC Pension Schemes had $6.53 billion (U.S.) in assets as of Dec. 31, according to the 1990 edition of Pension Funds and Their Advisers.

Of that, 67.4% is in stocks, 11.1% in bonds, 4% in cash, 13.3% in real estate and 4.2% in indexed-linked gilts.

Key personnel are J. Brotherick, manager-pension administration, and Paul E. Oldhum, investment manager.

British Telecommunications Staff Superannuation Scheme

	(U.S. $ millions)
Total pension assets	19,826
U.S. stocks	999
U.S. real estate	301
Internally managed assets	17,752
Indexed assets:	
Domestic stocks	8,550
Foreign stocks	1,216
Asset mix:	
Domestic stocks	51%
Domestic bonds	14%
Cash equivalents	2%
Foreign stocks	12%
Foreign bonds	1%
Domestic real estate	17%
Foreign real estate	3%

LONDON — British Telecommunications Staff Superannuation Scheme had $19.826 billion (U.S.) in assets as of Dec. 31. Of the total, 63% was in stocks, 20% in real estate, 15% in bonds and 2% in cash equivalents.

PosTel Investment Management Ltd., an investment management subsidiary of the post office and telecommunications funds, internally manages the bulk of the assets. External managers are Mercury Asset Management; Schroder Investment Management; and Merrill Lynch Canada.

Asset allocation and money manager selection are done internally.

Overseeing the investment management are Andrew R. Threadgold, chief executive; J. Stubbs, deputy director-U.K. equities; F.J. Reeder, director of property; A. Ormrod, director of economics and strategy; and C. Dreyfus, deputy director-overseas equities. All are with PosTel.

Caisse de Depot et Placement du Quebec

	(U.S. $ millions)
Total pension assets	20,200
U.S. stocks	807
U.S. bonds	753
Internally managed assets	19,190
Indexed assets:	

P&I/InterSec World 300

Continued from page 21

93.	Mass. Teachers/Empl.	U.S.	6,650
94.	Hughes Aircraft	U.S.	6,572
95.	Nat'l Westminster Bank	U.K.	6,537
96.	British Steel	U.K.	6,530
97.	Shell	U.K.	6,156
98.	British Air	U.K.	6,133
99.	Deutscher Bank	W. Germany	6,100
100.	Prudential Insurance	U.S.	6,042
101.	General Dynamics	U.S.	6,000
102.	Texas Employees	U.S.	5,969
103.	Canadian Nat'l Rail	Canada	5,939
104.	Westinghouse Electric	U.S.	5,828
105.	Commonwealth Banking	Australia	5,700
106.	Lloyds Bank	U.K.	5,500
107.	Chrysler	U.S.	5,467
108.	Missouri Public Schools	U.S.	5,328
109.	UMWA	U.S.	5,300
110.	Bell Canada	Canada	5,200
111.	Lonmodiagemes Dyrtids.	Denmark	5,100
112.	Unisys	U.S.	5,022
113.	Tokyo Mutual Benefit	Japan	4,990
114.	Procter & Gamble	U.S.	4,970
115.	Iowa Public Employees	U.S.	4,900
116.	Metaalindustrie BPF	Netherlands	4,800
117.	Caterpillar	U.S.	4,779
118.	SFIT	Australia	4,600
119.	Amoco	U.S.	4,581
120.	Mobil Oil	U.S.	4,560
121.	Metaalnijverheid BPF	Netherlands	4,500
122.	Hospitals of Ontario	Canada	4,400
123.	Nederlandse Spoorwegen	Netherlands	4,400
124.	Illinois Municipal	U.S.	4,326
125.	Fed. Retirement Thrift	U.S.	4,319
126.	Bayerische	W. Germany	4,300
127.	Monsanto	U.S.	4,300
128.	Pacific Gas & Electric	U.S.	4,259
129.	Unilever	U.K.	4,200
130.	Mississippi Employees	U.S.	4,129
131.	Alaska Retirement	U.S.	4,124
132.	RJR Nabisco	U.S.	4,100
133.	Hawaii Employees	U.S.	4,051
134.	Delta Air Lines	U.S.	4,050
135.	American Airlines	U.S.	4,000
136.	Lucas Industries	U.K.	4,000
137.	Midland Bank	U.K.	4,000
138.	Bouwnijverheid BPF	Netherlands	3,939
139.	San Francisco	U.S.	3,916
140.	Utah State	U.S.	3,906
141.	Migros	Switzerland	3,900
142.	Strathclyde Regional	U.K.	3,900
143.	Illinois State Universities	U.S.	3,845
144.	Canton of Zurich	Switzerland	3,800
145.	Water Authorities	U.K.	3,800
146.	British Broadcasting	U.K	3,700
147.	Greater Manchester	U.K.	3,700
148.	Merchant Navy	U.K.	3,700
149.	United Airlines	U.S.	3,700
150.	Kansas Employees	U.S.	3,692
151.	Nat'l Elec. Contractors	U.S.	3,675
152.	Northrop	U.S.	3,623
153.	British Aerospace	U.K.	3,600
154.	UNIRS	France	3,600
155.	Detroit City	U.S.	3,587
156.	United Methodist	U.S.	3,566
157.	Atlantic Richfield	U.S.	3,541
158.	Chicago Teachers	U.S.	3,502
159.	All Japan Mutual Credit	Japan	3,500
160.	Canadian Pacific	Canada	3,500
161.	General Electric	U.K.	3,500
162.	Ontario Hydro	Canada	3,500
163.	3M	U.S.	3,490
164.	L.A. Fire & Police	U.S.	3,477
165.	Kentucky Teachers	U.S.	3,461
166.	Georgia Employees	U.S.	3,458
167.	Xerox	U.S.	3,405
168.	Prudential	U.K.	3,400
169.	Metropolitan Life	U.S.	3,393
170.	J.C. Penney	U.S.	3,308
171.	Baugewerbe ZVK	W. Germany	3,300
172.	Bayer AG	W. Germany	3,300
173.	City of Zurich	Switzerland	3,300
174.	Ford Motor	U.K.	3,300
175.	KLM	Netherlands	3,300
176.	World Bank	U.S.	3,292
177.	Louisiana Teachers	U.S.	3,265
178.	Nevada Employees	U.S.	3,236
179.	Martin Marietta	U.S.	3,201
180.	Alcoa	U.S.	3,200
181.	Kentucky Retirement	U.S.	3,200
182.	Texaco	U.S.	3,200
183.	Illinois State Board	U.S.	3,173
184.	Grumman	U.S.	3,170
185.	Bethlehem Steel	U.S.	3,155
186.	Textron	U.S.	3,121
187.	Grafische BPF	Netherlands	3,100
188.	SBB	Switzerland	3,100
189.	Southern Co.	U.S.	3,100
190.	West Midlands Met.	U.K.	3,100
191.	TRW Investment Mgmt.	U.S.	3,096
192.	TVA	U.S.	3,090
193.	State Farm Insurance	U.S.	3,083
194.	Ohio Police & Firemen	U.S.	3,070
195.	Raytheon	U.S.	3,050
196.	Consolidated Edison	U.S.	2,962
197.	Honeywell	U.S.	2,909
198.	Tenneco	U.S.	2,877
199.	Indiana Employees	U.S.	2,817
200.	Ohio School Employees	U.S.	2,817
201.	Hoechst AG	W. Germany	2,800
202.	Hydro Quebec	Canada	2,800
203.	London Regional Trans.	U.K.	2,800
204.	West Yorkshire	U.K.	2,800
205.	Massachusetts PRIM	U.S.	2,791
206.	Deere & Co.	U.S.	2,720
207.	Int'l Paper	U.S.	2,709
208.	Aetna	U.S.	2,703
209.	Dow Chemical	U.S.	2,700
210.	IBM Deutschland	W. Germany	2,700
211.	Union Carbide	U.S.	2,693
212.	Owens-Illinois	U.S.	2,644
213.	Southern Baptist	U.S.	2,559
214.	Air Canada	Canada	2,500
215.	Akzo	Netherlands	2,500
216.	Coop Schweiz	Switzerland	2,500
217.	Sulzer Brothers	Switzerland	2,500
218.	ITT	U.S.	2,497
219.	Los Angeles City	U.S.	2,497
220.	Trans World Airlines	U.S.	2,470
221.	Eli Lilly	U.S.	2,432
222.	Eastern Airlines	U.S.	2,410
223.	Hoogovens	Netherlands	2,400
224.	London Residuary Body	U.K.	2,400
225.	Presbyterian Church	U.S.	2,400
226.	TSB Group	U.K.	2,400
227.	Southern Calif. Edison	U.S.	2,380
228.	Nat'l Rural Elec. Co-op	U.S.	2,304
229.	Rhode Island	U.S.	2,300
230.	SSIH	Switzerland	2,300
231.	Halliburton	U.S.	2,270
232.	Louisiana State	U.S.	2,250
233.	Phillips Petroleum	U.S.	2,250
234.	Hospital/Healthcare	U.S.	2,241
235.	BP America	U.S.	2,218
236.	Hitachi	Japan	2,200
237.	IBM	U.K.	2,200
238.	Matsushita Electric	Japan	2,200
239.	Onderling BPF	Netherlands	2,200
240.	Rolls-Royce	U.K.	2,200
241.	Texas Municipal	U.S.	2,200
242.	Bakery & Confectionery	U.S.	2,175
243.	Arkansas Teachers	U.S.	2,166
244.	Commonwealth Edison	U.S.	2,161
245.	Op. Engineers, Central	U.S.	2,159
246.	Armco	U.S.	2,156
247.	Southern Calif. UFCW	U.S.	2,133
248.	Boilermaker Blacksmith	U.S.	2,132
249.	Allied-Lyons	U.K.	2,100
250.	BTR	U.K.	2,100
251.	Unilever	Netherlands	2,100
252.	Travelers	U.S.	2,075
253.	Navistar	U.S.	2,058
254.	Citicorp	U.S.	2,056
255.	Inland Steel	U.S.	2,041
256.	Motorola	U.S.	2,017
257.	Ansett	Australia	2,000
258.	General Motors Canada	Canada	2,000
259.	Merseyside County	U.K.	2,000
260.	Sun Alliance Insurance	U.K.	2,000
261.	Texas County & District	U.S.	2,000
262.	Toshiba	Japan	2,000
263.	Oklahoma Teachers	U.S.	1,968
264.	FPL Group	U.S.	1,963
265.	Abbott Laboratories	U.S.	1,923
266.	S. New England Tel.	U.S.	1,912
267.	BASF	W. Germany	1,900
268.	Central Electricity	Switzerland	1,900
269.	CIBA-GEIGY	Switzerland	1,900
270.	Imperial Group	U.K.	1,900
271.	Koopvaardij BPF	Netherlands	1,900
272.	Mijnwerkers (Limburg)	Netherlands	1,900
273.	PTT Nederland	Netherlands	1,900
274.	Thorn EMI	U.K.	1,900
275.	New Mexico Educational	U.S.	1,890
276.	American Stores	U.S.	1,882
277.	PPG Industries	U.S.	1,880
278.	Chicago Municipal	U.S.	1,845
279.	Episcopal Church	U.S.	1,837
280.	United Parcel	U.S.	1,802
281.	C.R.P.N.C.P.	France	1,800
282.	DSM	Netherlands	1,800
283.	L.A. Water & Power	U.S.	1,800
284.	Maine State	U.S.	1,800
285.	New Mexico Employees	U.S.	1,800
286.	Philips	U.K.	1,800
287.	American Electric Power	U.S.	1,789
288.	Evang. Lutheran Church	U.S.	1,782
289.	CIGNA	U.S.	1,775
290.	K mart	U.S.	1,775
291.	Philadelphia City	U.S.	1,754
292.	Hercules	U.S.	1,752
293.	New York Life	U.S.	1,749
294.	Digital Equipment	U.S.	1,742
295.	GenCorp	U.S.	1,719
296.	Canadian Broadcasting	Canada	1,700
297.	Civil Aviation Authority	U.K.	1,700
298.	Cooper Industries	U.S.	1,700
299.	Huisartsen BPF	Netherlands	1,700
300.	Indiana Teachers	U.S.	1,700

Foreign stocks	1,090
Asset mix	
Domestic stocks	27.1%
Domestic bonds	45.3%
Cash equivalents	5%
Foreign stocks	7.8%
Foreign bonds	5.3%
Domestic real estate	4.5%
Other	5%

MONTREAL — Caisse de Depot et Placement du Quebec has $20.2 billion (U.S.) in assets as of Dec. 31. Of that, 34.9% was in stocks, 50.6% in bonds, 4.5% in domestic real estate, 5% in cash equivalents and 5% in mortgages.

Some 95% of assets are managed internally. Outside money managers are State Street Bank and Trust Co.; HD International Ltd.; Dunedin Fund Managers Ltd.; and Warburg Investment Management International Ltd.

Key personnel overseeing the fund are Vice Presidents Michel Nadeau, planning and relations with depositors and variable income; Claude Ferland, fixed income; Daniel Paille, corporate investments; and Jean-Claude Scraire, legal and corporate affairs.

Canadian National Railway

	(U.S. $ millions)
Total pension assets	5,939
U.S. stocks	238
Internally managed assets	5,701
Asset mix	
Domestic stocks	32%
Domestic bonds	41%
Cash equivalents	3%
Foreign stocks	10%
Domestic real estate	10%
Other	4%

MONTREAL — The Canadian National Railway Co. had $5.939 billion (U.S.) in assets as of Dec. 31. Of that, 42% was in stocks, 41% in bonds, 3% in cash, 10% in real estate, 3% in oil and gas and 1% in private corporations.

Fund officials will not disclose outside money managers.

All asset allocation and money manager selection is handled by the internal staff.

Tullio Cedraschi is president and chief investment officer.

Electricity Supply Pension Scheme

	(U.S. $ millions)
Total pension assets	12,541
Asset mix	
Domestic stocks	47%
Domestic bonds	10.7%
Cash equivalents	4.9%
Foreign stocks	19.8%
Foreign bonds	0.1%
Domestic real estate	10.8%
Foreign real estate	1.8%
Other	4.9%

LONDON — The Electricity Supply Pension Scheme had $12.541 billion in assets as of Dec. 31, according to the 1990 edition of Pension Funds and Their Advisers. Of the total, 66.8% was in stocks, 10.8% in bonds, 12.6% in real estate, 4.9% in cash, 3.1% in index-linked gilts, 0.4% in agriculture and 1.4% in other.

According to Pension Funds and Their Advisers, the fund uses outside managers Debenham, Tewson and Chinnocks Ltd., international real estate; Lazard Securities Ltd., investment adviser-securities; Jones Lang Wootton, real estate valuer; and Schroder Investment Management Ltd., investment adviser for strategy.

Key personnel overseeing the fund are M.B. Cannan, chief executive; T.M. Bell, investment manager-properties; and R.J.M. Gibson, investment manager-securities.

Federation of National Public Service Affiliated Personnel Mutual Aid Association

	(U.S. $ millions)
Total pension assets	38,280
Asset mix	
Long-term loans	17.9%
Bonds	14.7%
Government deposits	30.4%
Life insurance deposits	13.4%
Long-term trust bank deposits	9.5%
Other bank deposits	7.3%
Real estate	6.8%

TOKYO — The Federation of National Public Service Affiliated Personnel Mutual Aid Association had $38.28 billion (U.S.) in assets as of March 1989, according to the Japan Bond Research Institute. The Japan Pension Fund Association provided the asset mix figures above.

The fund uses domestic trusts banks and domestic life insurance companies as external money managers.

Imperial Chemical Industries

	(U.S. $ millions)
Total pension assets	8,070
U.S. stocks	533
U.S. real estate	13
Internally managed assets	7,909
Asset mix:	
Domestic stocks	53%
Domestic bonds	11%
Cash equivalents	5%
Foreign stocks	13%
Foreign bonds	1%
Domestic real estate	14%
Foreign real estate	1%
Other	2%

LONDON — The Imperial Chemical Industries PLC pension fund had assets of $8.07 billion (U.S.) as of Dec. 31. Of that, 66% was in stocks, 12% in bonds, 5% in cash, 15% in real estate and 2% in unlisted equity.

All but 2% of assets are managed internally; the remainder is invested in mutual funds. Manager selection and asset allocation are done in-house.

Tom Heyes, managing director of ICI Investment Management Ltd., is the key person overseeing the funds.

Japan Mutual Aid Association of Public School Teachers

	(U.S. $ millio
Total pension assets	48,9
Asset mix	
Long-term loans	28.
Bonds	21.
Government deposits	27.
Life insurance company deposits	5.
Long-term trust bank deposits	5.
Other bank deposits	10.

TOKYO — The Japan Mutual A Association of Public School Teache had $48.969 billion as of March 198 according to the Japan Bond Researc Institute. The asset mix cited abo was provided by the Japan Pensi Fund Association.

External managers are: IBJ Inves ment Management, DKB Investme Management, LTCB Investment Ma agement and Fuji Bank Investme Management.

National Westminster Bank Pension and Widows' and Orphans' Funds

	(U.S. $ millio
Total pension assets	6,5
Asset mix	
Domestic stocks	55
Domestic bonds	7.
Cash equivalents	6.
Foreign stocks	17.
Foreign bonds	0.
Domestic real estate	10.
Other	

SURREY, England — The Nation Westminster Bank Pension a Widows' and Orphans' Pension Fun had $6.537 billion (U.S.) in assets of Dec. 31, according to the 1990 e tion of Pension Funds and Their A visers. Of that, 73.4% was in stoc 7.9% in bonds, 10.2% in real esta 6.5% in cash and 2% in index-link gilts.

The fund uses R.W. Watson & So as pension fund consultant.

Key personnel overseeing the pe sion fund are J.M. Birkett, group pe sion manager, and M.N. Whatle manager-pension fund office.

State Authorities Superannuation Board of New South Wales

	(U.S. $ millio
Total pension assets	7,9
Internally managed assets	6,7
Indexed assets:	
Domestic stocks	1
Foreign stocks	1
Asset mix:	
Domestic stocks	3
Domestic bonds	1
Cash equivalents	
Foreign stocks	1
Domestic real estate	3

SYDNEY, Australia — The Sta Authorities Superannuation Board New South Wales had $7.938 billi (U.S.) in assets as of Dec. 31. Of th 45% was in stocks, 18% in bond 32% in real estate and 5% in cash.

Fund officials declined to ident outside money managers.

Frank Russell Co. is one of t fund's consultants.

Gregory Bunbury is president a chief executive officer.

Ontario Municipal Employees Retirement System

	(U.S. $ millio
Total pension assets	10,6
Asset mix:	
Domestic stocks	4
Domestic bonds	2
Cash equivalents	
Foreign stocks	1
Domestic real estate	
Other	1
U.S. stocks	1
Internally managed assets	9,0
Indexed assets:	
Domestic stocks	1

TORONTO — The Ontario Muni pal Employees Retirement System h $10.621 billion as of Dec. 31. Of th 54% was in stocks, 21% in bonds, 5 in cash, 5% in real estate and 15% mortgages.

The fund uses three global exter

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managers, which officials wouldn't identify, and makes all asset allocation and money manager selection decisions in-house.

Key personnel overseeing the fund are Robert Sillcox, director of investments, and Doug Greaves, associate director.

Pensioenfonds PGGM

	(U.S. $ millions)
Total pension assets	19.287
U.S. stocks	943
U.S. bonds	105
U.S. real estate	943
Internally managed assets	9.486
Indexed assets	
Domestic stocks	181
Foreign stocks	1.782
Asset mix	
Domestic stocks	3%
Domestic bonds	60.4%
Cash equivalents	0.5%
Foreign stocks	14.4%
Foreign bonds	3.8%
Domestic real estate	6.9%
Foreign real estate	10.6%
Other	0.4%

ZEIST, Netherlands — Pensioenfonds PGGM (Pension Funds for Health, Mental & Social Welfare) had $19.287 billion (U.S.) in assets as of Dec. 31. Of that, 17.4% was in stocks, 64.2% in bonds, 17.5% in real estate, 0.5% in cash and 0.4% in venture capital.

The fund declined to name its external investment managers.

Key personnel overseeing the fund are D.J. de Beus, chairman of the board and managing director; M.T. Kooistra, managing director-investments; and P.S. van de Berg, managing director-financial affairs.

Philips Pension Funds

	(U.S. $ millions)
Total pension assets	9.434
U.S. stocks	800
U.S. bonds	100
U.S. real estate	180
Internally managed assets	9,057
Indexed assets	
Foreign stocks	135
Asset mix	
Domestic stocks	7%
Domestic bonds	20%
Cash equivalents	1%
Foreign stocks	21%
Foreign bonds	4%
Domestic real estate	12%
Foreign real estate	4%
Other	31%

EINDHOVEN, Netherlands — Philips Pension Funds had $9.434 billion (U.S.) in assets as of Dec. 31. Of that, 28% was in stock, 24% in bonds, 16% in real estate, 1% in cash, 24% in private loans and 7% in mortgages.

The fund's outside money managers are: G.T. Capital Management; Jardine Fleming; J.P. Morgan; and Morgan Grenfell.

Key personnel overseeing the pension fund are A.D.J. van Riel, general manager; J. van der Vliet, investment manager; W. Frencken, head of real estate; F. Hendriks, head of equities; and R. van Driel, head of bonds and private loans.

Post Office Staff Superannuation Scheme

	(U.S. $ millions)
Total pension assets	12,951
U.S. stocks	628
U.S. real estate	195
Internally managed assets	11,554
Indexed assets:	
Domestic stocks	5,463
Foreign stocks	768
Asset mix:	
Domestic stocks	51%
Domestic bonds	14%
Cash equivalents	2%
Foreign stocks	12%
Foreign bonds	1%
Domestic real estate	17%
Foreign real estate	3%

LONDON — The Post Office Staff Superannuation Scheme had $12.951 billion (U.S.) in assets as of Dec. 31. Of the total, 63% was in stocks, 20% in real estate, 15% in bonds and 2% in cash equivalents.

External managers are Mercury Asset Management; Schroder Investment Management; and Merrill Lynch Canada. Most of the assets are managed internally, by Postel Investment Management Ltd., the investment management subsidiary for the post office and telecommunications funds.

Asset allocation and money manager selection are handled internally.

Overseeing the investment management of the fund are Andrew Threadgold, chief executive; J. Stubbs, deputy director-U.K. equities; F.J. Reeder, director of property; A. Ormrod, director of economics and strategy; and C. Dreyfus, deputy director-overseas equities. All are with PosTel.

Public Service Superannuation Account

	(U.S. $ millions)
Total pension assets	$26,423
Asset mix	
Cash equivalents	100%
Internally managed assets	$26,423

OTTAWA — The Public Service Superannuation Account had $26.423 billion in assets as of Dec. 31. All assets were in cash. The fund uses no external managers or advisers.

Sharon Hamilton is acting director of the pensions division of the Treasury Board.

Shell Contributory Pension Fund

	(U.S. $ millions)
Total pension assets	6.156
Asset mix	
Domestic stocks	41.4%
Domestic bonds	8.1%
Cash & deposits	2.3%
Foreign stocks	19.5%
Domestic real estate	15.3%
Foreign real estate	5.2%
Other	8.2%

LONDON — The Shell Contributory Pension Fund has $6.156 billion (U.S.) in assets, according to the 1990 edition of Pension Funds and Their Advisers. Of the total, 60.9% was in stocks, 20.5% in real estate, 8.2% in index-linked gilts, 8.1% in bonds and 2.3% in cash and deposits.

Shell International Petroleum Co. Ltd. is adviser for asset allocation and manager selection.

R.N. Gaskell is pension fund investment manager.

Stichting Shell Pensioenfonds

	(U.S. $ millions)
Total pension assets	7,233
U.S. investments	943
Internally managed assets	7,233
Asset mix	
Domestic stocks	16%
Domestic bonds	30%
Foreign stocks	25%
Foreign bonds	11%
Domestic real estate	11%
Foreign real estate	7%

THE HAGUE, Netherlands — Stichting Shell Pensioenfonds had $7.233 billion (U.S.) in assets as of Dec. 31. Of that, 41% was in stock, 41% in bonds and 18% in real estate.

All assets are managed internally.

The board of trustees oversees the pension fund.

Universities Superannuation Scheme

	(U.S. $ millions)
Total pension assets	8,100
Asset mix:	
Domestic stocks	44.9%
Domestic bonds	7%
Cash equivalents	5%
Foreign stocks	15.9%
Foreign bonds	0.1%
Domestic real estate	15%
Foreign real estate	0.6%
Other	11.5%

LIVERPOOL, England — Universities Superannuation Scheme had $8.1 billion (U.S.) in assets as of Dec. 31, according to Pension Funds and Their Advisers. Of that, 60.8% was in stocks, 7.1% in bonds, 15.6% in real estate, 5% in cash, 10% in individual life policies; and 1.5% in managed fund investments.

The fund uses Jones Lang Wootton as a real estate adviser.

Key personnel overseeing the fund are D. Hobson, general manager-pensions, and Jack Spink, general manager-investments.

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Versus other International Managers
(April 1987 - March 1990)

Ranking in F. Russell Universe† 7th Percentile
Ranking in WM Universe† 8th Percentile

Cumulative Total Returns
(April 1987 - March 1990)

DRIAM* 57.1%
FT Europac Index 17.1%
MSCI EAFE Index 16.3%

For additional information call:
Dave Dewey in New York: 212-906-7659
Robert Rawe in London: 71-493-1239
Past performance is no guarantee of future performance.

†The F. Russell Universe consists of 123 portfolios and the WM Universe consists of 104 portfolios. All portfolios reflected in both universes are invested in the international equity market (i.e., Europe and the Far East).
*DRIAM's performance reflects the results of its first international equity portfolio, which was the only account of this type managed by DRIAM during the full measurement period of April 1987 through March 1990. DRIAM's results have been calculated after the deduction of advisory fees and other transaction costs, and reflect the reinvestment of dividends and other earnings.

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Global

Continued from page 21

"It gives you an overview that you don't have with passive management," she said. "Active management may play a greater role in assessing the effects of the barriers to (markets) integration by analyzing the risks inherent in investing overseas."

Mr. Nowakowski said that overview is now being kept in many instances by the pension fund instead of the investment manager.

The trend of pension funds choosing regional and country mandates has accomplished that. "The pension fund is making the critical country allocation cut," he said.

Among the leaders in the *P&I* survey, Brinson Partners and Capital Guardian Trust Co., Los Angeles, swapped second and third places from last year's ranking.

Baring International Investment Ltd., London, jumped to fourth place from seventh, while Batterymarch Financial Management, Boston, dropped to 10th from fourth. ■

A

Acadian Asset Management

260 Franklin St., Boston, Mass. 02110;
(617) 439-6141

Total assets managed	$1,100,000,000
Non-U.S. pension assets	$60,000,000
U.S. tax-exempt assets managed	
Total	$1,040,000,000
International	$1,010,000,000
Equity accounts	$1,010,000,000
Global	$30,000,000
Equity accounts	$30,000,000
Minimum separate account	$25,000,000

Acadian Asset Management Inc.'s international equity assets were committed most heavily to Japan, Singapore, West Germany, the U.K. and Switzerland as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Japan, Singapore, Italy and the U.K.

Of the U.S. institutional tax-exempt assets invested abroad, $876 million is managed actively and $164 million is managed in active/passive programs.

Analysts or portfolio managers are stationed in Boston.

The firm applies a multifactor, structured and disciplined valuation technique to a broad universe of countries and individual securities to achieve the highest possible value-added per unit of risk.

The firm, a subsidiary of Acadian Financial Research Inc., has been registered with the SEC since 1986.

Gary L. Bergstrom is chief investment officer; Churchill G. Franklin is client contact.

Alliance Capital Management L.P.

1345 Avenue of the Americas, New York, N.Y. 10105; (212) 969-1000

Total assets managed	$43,873,000,000
Non-U.S. pension assets	$3,068,000,000
U.S. tax-exempt assets managed	
Total	$24,958,000,000
International	$1,048,000,000
Equity accounts	$1,048,000,000
Global	$443,000,000
Equity accounts	$76,000,000
Bond accounts	$367,000,000
Minimum separate account	$10,000,000

Alliance Capital Management L.P.'s international equity assets were committed most heavily to Japan, West Germany, the U.K., Canada and the Netherlands as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., West Germany, Japan, the Netherlands and the U.K.

Of the U.S. institutional tax-exempt assets invested abroad, $1.124 billion is managed actively and $367 million passively.

Analysts or portfolio managers are stationed in New York, Minneapolis, Cleveland, San Francisco, London, Tokyo and Madrid.

The firm's stock selection process combines creativity and discipline, with the objective of identifying markets, industries and companies with superior relative 2 to 3 years' earnings growth, and to invest sufficiently early when valuations are reasonable.

The firm has been registered with the SEC since 1971.

Dave H. Williams is chief investment officer; Carol A. Zipkin is client contact.

ANB Investment Management Co.

1 N. LaSalle St., Suite 600, Chicago, Ill. 60690; (312) 661-5866

Total assets managed	$11,874,000,000
U.S. tax-exempt assets managed	
Total	$10,774,000,000
International	$307,000,000
Equity accounts	$307,000,000

ANB Investment Management Co.'s international equity assets were committed most heavily to Japan, the U.K., West Germany, France and Switzerland as of March 31.

All of the U.S. institutional tax-exempt assets invested abroad are managed passively.

Analysts or portfolio managers are stationed in Chicago.

The firm uses a passive approach that seeks to replicate the risk and return characteristics of the EAFE index.

The firm is a subsidiary of American National Bank.

Jack Tilton is chief investment officer; Ken Sobolewski is client contact.

Arnhold & S. Bleichroeder International

45 Broadway, New York, N.Y. 10006;
(212) 943-9200

Total assets managed	$450,000,000
U.S. tax-exempt assets managed	
Total	$450,000,000
International	$450,000,000
Equity accounts	$450,000,000
Minimum separate account	$5,000,000

Arnhold & S. Bleichroeder International's international equity assets were committed most heavily to the U.K., West Germany, Australia, Italy and Switzerland as of March 31.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in New York.

The firm concentrates on stock selection, stressing special situations with high value.

The firm, a subsidiary of Arnhold & S. Bleichroeder Inc., has been registered with the SEC since 1975.

Howard B. Moss is chief investment officer; Fred Reynolds is client contact.

Axe Core Investors

400 Benedict Ave., Tarrytown, N.Y. 10591; (914) 333-5222

Total assets managed	$815,000,000
U.S. tax-exempt assets managed	
Total	$772,000,000
International	$295,000,000
Equity accounts	$295,000,000
Minimum separate account	$10,000,000

Axe Core Investors' international equity assets were committed most heavily to Japan, the U.K., West Germany, France and Italy as of March 31.

All of the U.S. institutional tax-exempt assets invested abroad are managed passively.

Analysts or portfolio managers are stationed in Tarrytown, N.Y.

The firm manages a condensed portfolio of 150 issues screened for liquidity, purchased in the local foreign markets and designed to track the EAFE index. All trades are then converted into American depository receipts.

The firm, a subsidiary of Axe-Houghton/USF&G, has been registered with the SEC since 1984.

Robert A. Windsor is chief investment officer; Brian J. Harris is client contact.

B

Julius Baer Investment Management Inc.

330 Madison Ave., New York, N.Y. 10017; (212) 949-9055

Total assets managed	$740,000,000
Non-U.S. pension assets	$36,000,000
U.S. tax-exempt assets managed:	
Total	$704,000,000
International	$676,000,000
Equity accounts	$24,000,000
Bond accounts	$635,000,000
Balanced	$17,000,000
Global	$28,000,000
Bond accounts	$28,000,000
Minimum separate account	$10,000,000

Julius Baer Investment Management Inc.'s international equity assets were committed most heavily to Japan, the U.K., France, West Germany, the Netherlands and Switzerland, as of March 31.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in Zurich, London, New York, Frankfurt and Tokyo.

The investment policy is characterized by active country and currency allocation as well as active maturity management. Allocation decisions are based on fundamental economic research, concentrating on top-quality issuers in strong, stable coun-es. Its portfolios primarily are composed of gov- rnment and government-agency issues, with an A minimum requirement for corporate issues.

The firm, a subsidiary of Bank Julius Baer, been egistered with the SEC since 1983.

Peter J. Widmer is chief investment officer; Jay A. irnberger is client contact.

Bankers Trust Investment Management

280 Park Ave., Suite 600, New York,
N.Y. 10017; (212) 850-4057

Total assets managed	$94,300,000,000
Non-U.S. pension assets	$3,920,000,000
U.S. tax-exempt assets managed	
Total	$85,581,000,000
International	$1,538,000,000
Equity accounts	$1,528,000,000
Bond accounts	$10,000,000
Global	$127,000,000
Bond accounts	$127,000,000
Minimum separate account	$10,000,000

Bankers Trust Investment Management's interna- onal equity assets were committed most heavily to apan, West Germany, the U.K., France and Singa- ore Malaysia as of March 31.

Of the U.S. institutional tax-exempt assets in- ested abroad, $665 million is managed actively and $1 billion, passively.

Analysts or portfolio managers are stationed in London, Tokyo, New York, Sydney, Zurich and Hong Kong.

The firm's active international equity investment approach is top-down and sector-driven, incorporating both fundamental and quantitative disciplines. Regional specialist portfolio teams interpret key investment themes in the context of each market's characteristics.

The firm, a subsidiary of Bankers Trust Co., has been registered with the SEC since 1982.

H. Kent Atkins is chief investment officer; Laurie Oat is client contact.

Baring International Investment

155 Bishopsgate, London EC2M 3XY,
U.K.; 071-628-6000

Total assets managed	$4,088,000,000
Non-U.S. pension assets	$482,000,000
U.S. tax-exempt assets managed	
Total	$3,606,000,000
International	$3,606,000,000
Equity accounts	$2,482,000,000
Bond accounts	$1,124,000,000
Minimum separate account	$25,000,000

Baring International Investment's international equity assets were committed most heavily to Japan, the U.K., West Germany, France and Switzerland as of March 31.

Of the U.S. institutional tax-exempt assets invested abroad, $3.329 billion is managed actively and $277 million in active/passive strategies.

Analysts or portfolio managers are stationed in London, Tokyo, Hong Kong and Seoul.

The firm offers a range of equity and fixed-income products. It will deviate significantly from the index and switch between markets, taking advantage of relative values. The firm has expertise in regional markets.

The firm, a subsidiary of Baring Asset Management, been registered with the SEC since 1980.

Peter Hartley is chief investment officer; Michael Palone is client contact at (617) 357-9074.

Batterymarch Financial Management

600 Atlantic Ave., Boston, Mass.
02210; (617) 973-9300

Total assets managed	$8,176,000,000
U.S. tax-exempt assets managed	
Total	$5,418,000,000
International	$1,476,000,000
Equity accounts	$1,476,000,000
Global	$1,225,000,000
Equity accounts	$1,225,000,000
Minimum separate account	$10,000,000

Batterymarch Financial Management's international equity assets were committed most heavily to Japan, West Germany, the U.K., France and Canada as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Japan, West Germany, the U.K. and France.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in Boston.

The firm has created a single integrated data base of non-U.S. companies that it uses in conjunction with computer-driven strategy models to find unrecognized value. Models are designed to analyze companies both as a corporate investor would and as an institutional investor would, capturing the dominant indications. Country allocations result from the process of finding undervalued companies.

The firm has been registered with the SEC since 1969.

Dean LeBaron is chief investment officer; William H. Yankus is client contact.

BEA Associates Inc.

153 E. 53rd St., New York, N.Y.
10022; (212) 832-2626

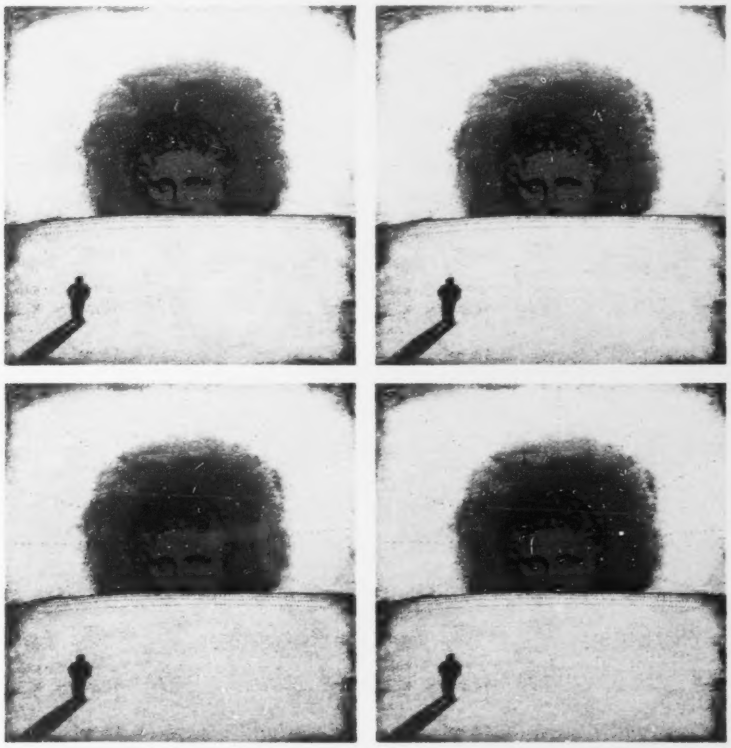
Total assets managed	$9,797,000,000

International managers ranked by combined international/global tax-exempt account assets*

		U.S. $ mils
1.	State Street Bank	7,874
2.	Brinson Partners	6,819
3.	Capital Guardian Trust	4,441
4.	Baring Int'l Investment	3,606
5.	Wells Fargo Nikko	3,595
6.	J.P. Morgan Investment	3,252
7.	Rowe Price-Fleming Int'l	3,051
8.	Schroder Capital	2,905
9.	Morgan Stanley Asset	2,895
10.	Batterymarch Financial	2,701
11.	Morgan Grenfell Investment	2,631
12.	Grantham Mayo v. Otterloo	2,603
13.	Templeton Int'l	2,545
14.	WorldInvest	2,319
15.	Nomura Capital	2,127
16.	Dimensional Fund Advisors	1,985
17.	Warburg Investment	1,831
18.	Oechsle Int'l Advisors	1,788
19.	Bankers Trust Investment	1,665
20.	Alliance Capital	1,491
21.	PCM Int'l	1,429
22.	Chase Investors	1,420
23.	GE Investment	1,089
24.	Boston Int'l Advisors	1,078
25.	Acadian Asset	1,040
26.	Fiduciary Trust Int'l	958
27.	Scudder, Stevens & Clark	914
28.	TCW Global Advisors	865
29.	Hill Samuel/IA	859
30.	Travelers	838
31.	BEA Associates	814
32.	Julius Baer Investment	704
33.	Globe Finlay	683
34.	IDS Int'l	665
35.	Fidelity Mgmt. Trust	653
36.	Capital Research & Mgmt.	606
37.	Mellon-Pictet Int'l	572
38.	HD Int'l	495
39.	PanAgora Asset	490
40.	Pacific Investment	468
41.	SBC Portfolio Mgmt. Int'l	467
42.	Brown Brothers Harriman**	463
43.	Wellington Mgmt.	458
44.	Payden & Rygel Investment	455
45.	N.M. Rothschild Int'l	455
46.	Marsh/Cunningham-Castegren	454
47.	Arnhold & S. Bleichroeder Int'l	450
48.	Nikko Capital	437
49.	GT Capital	420
50.	Daiwa Int'l Capital	388
51.	Philippe Investment	385
52.	County NatWest Investment	367
53.	Beutel, Goodman Int'l	341
54.	Citicorp Investment	336
55.	INVESCO MIM	336
56.	Marvin & Palmer Associates	330
57.	ANB Investment	307
58.	Discount Corp. of New York	300
59.	Axe Core Investors	295
60.	Posthorn Global Asset	282
61.	Putnam	265
62.	CIGNA Asset Advisers	253
63.	Walter Scott	250
64.	Murray Johnstone Int'l	247
65.	Lombard Odier Int'l	246
66.	INTECH	233
67.	Smith Barney Global Capital	221
68.	Massachusetts Financial	210
69.	Emerging Markets Investors	207
70.	Burgess Capital	203
71.	Kleinwort Benson Int'l	201
72.	Bessemer Trust	188
73.	Martin Currie	181
74.	Dunedin Fund Managers	179
75.	Aetna Capital Mgmt. Int'l	174
76.	Wardley Investment Services	174
77.	Lazard Freres Asset	146
78.	Ivory & Sime Int'l	138
79.	Dillon Read Int'l	128
80.	Miller, Anderson & Sherrerd	128
81.	Boatmen's Trust	118
82.	BZW Investment**	114
83.	Brandes Investment	98
84.	Lexington Mgmt.	94
85.	Alan Patricof Associates	93
86.	Van Eck Associates	80
87.	Matuschka Group	78
88.	AIG Global Investors	70
89.	The Principal	60
90.	Interinvest	55
91.	Marathon Asset	55
92.	GIM Global Advisors	44
93.	Yamaichi Capital	38
94.	Security Capital	35
95.	Sit/Kim Int'l	35
96.	Roll & Ross	30
97.	Credit Suisse Asset	25
98.	Baillie Gifford Overseas	16
99.	NCNB National Bank	16
100.	Wright Investors' Service**	16
101.	Northwest Quadrant	14
102.	Touche Remnant Investment	10
103.	Citizens & Southern Trust**	8
104.	Confederation Life Insurance	7
105.	Edinburgh-Wilmington Int'l	7
106.	Bee & Associates	6
107.	Scimitar North American	4
108.	UBS Phillips & Drew	4
	Total	91,892

*U.S., institutional, discretionary, tax-exempt assets
**As of Dec. 31

We are what we repeatedly do.
Excellence then is not an act
but a habit. *Aristotle*



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Pensions&Investments

The newspaper of corporate and institutional investing

Non-U.S. pension assets	$67,000,000
U.S. tax-exempt assets managed:	
Total	$8,918,000,000
International	$184,000,000
Equity accounts	$184,000,000
Global	$630,000,000
Equity accounts	$630,000,000
Minimum separate account	$5,000,000

BEA Associates Inc.'s international equity assets were committed most heavily to Japan, the U.K., Thailand, West Germany and Mexico as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Japan, Thailand, West Germany and Mexico.

Of the U.S. institutional tax-exempt assets invested abroad $764 million is managed actively and $50 million, passively.

Analysts or portfolio managers are stationed in New York.

The firm's approach is both top-down and bottom-up. The fundamental objective is to identify companies that have value not reflected in the stock price. The firm is contrarian, seeking value in mature markets as well as markets with few players or with high risk.

The firm has been registered with the SEC since 1968.

William W. Priest Jr. and Mark Arnold are chief investment officers; Paula Treneer is client contact.

Beutel, Goodman International PLC

5-6 St. Andrew's Hill, London EC4V
5BY U.K.; 071-489-0218

Total assets under management	$448,000,000
U.S. tax-exempt assets managed:	
Total	$341,000,000
International	$246,000,000
Bond accounts	$246,000,000
Global	$95,000,000
Bond accounts	$95,000,000
Minimum separate account	$10,000,000

Beutel, Goodman International PLC manages all of the U.S. institutional tax-exempt assets invested abroad in active strategies.

Analysts or portfolio managers are stationed in London.

The firm believes early identification of significant investment opportunities can be achieved most consistently through a process of relative value analysis across countries. The focus of its approach is on active country allocation in liquid markets. It principally uses the highest quality securities with maturities at the medium to long end of the market.

The firm has been registered with the SEC since 1984.

Olaf Rogge is chief investment officer. John Makowske, Fairfield Capital Associates, is client contact at (203) 254-1215.

Boston International Advisors Inc.

75 State St., Boston, Mass. 02109;
(617) 345-9550

Total assets managed	$1,296,000,000
Non-U.S. pension assets	$18,000,000
U.S. tax-exempt assets managed:	
Total	$1,078,000,000
International	$1,032,000,000
Equity accounts	$1,032,000,000
Global	$46,000,000
Equity accounts	$46,000,000
Minimum separate account	$25,000,000

Boston International Advisors Inc.'s international equity assets were committed most heavily to Japan, the U.K., France, Italy and Australia as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Japan, France, the U.K. and Canada.

Of the U.S. institutional tax-exempt assets invested abroad, $528 million is managed actively, $130 million is active/passive and $420 million, passively.

Analysts or portfolio managers are stationed in Boston.

The firm uses quantitative, value-driven techniques to allocate among world equity markets and to select stocks within markets. The firm also provides strategic currency hedging and customized index funds.

The firm has been registered with the SEC since 1987.

Lyle H. Davis is chief investment officer; Jennifer Dunning is client contact.

Brandes Investment Management

12760 High Bluff Drive, Suite 160, San
Diego, Calif. 92130; (619) 755-0239

Total assets managed	$175,000,000
U.S. tax-exempt assets managed:	
Total	$98,000,000
International	$3,000,000
Equity accounts	$3,000,000
Global	$95,000,000
Equity accounts	$95,000,000
Minimum separate account	$400,000

Brandes Investment Management's international equity assets were committed most heavily to the Netherlands, Hong Kong, Canada, Sweden and West Germany as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Australia, the Netherlands, Hong Kong and West Germany.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in San Diego.

The firm uses a Graham & Dodd approach to determine intrinsic business values from a fundamental, bottom-up analysis, and seeks to make purchases at a significant discount from value.

The firm has been registered with the SEC since 1974.

Charles Brandes is chief investment officer; W. Roberts Wood is client contact.

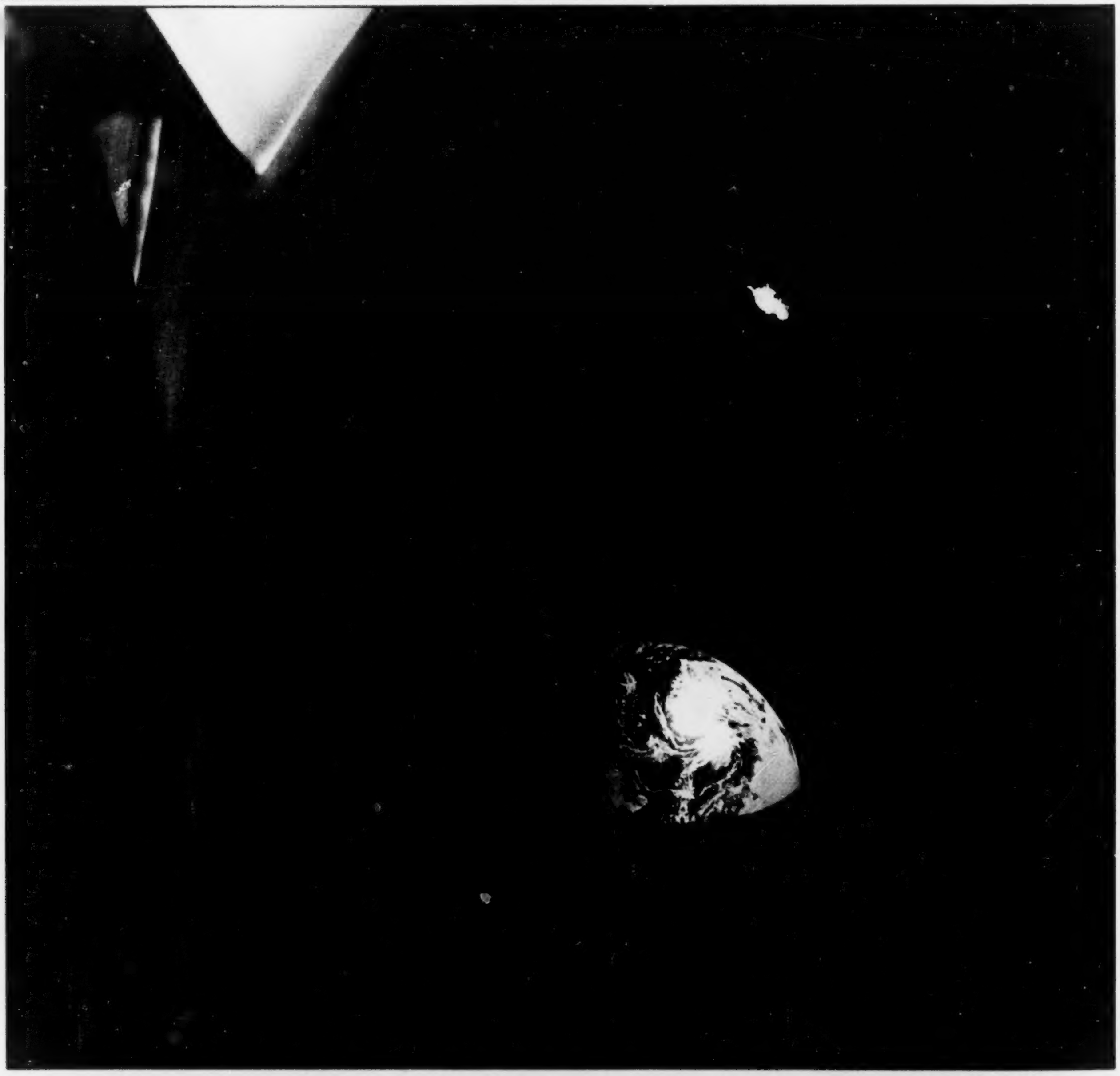
Brinson Partners Inc.

3 First National Plaza, 70 W. Madison
St., Ninth Floor, Chicago, Ill.
60602-4298; (312) 732-7100

Total assets managed	$13,911,000,000
Non-U.S. pension assets	$138,000,000
U.S. tax-exempt assets managed:	
Total	$13,511,000,000
International	$2,167,000,000
Equity accounts	$880,000,000
Bond accounts	$1,287,000,000
Global	$4,652,000,000
Equity accounts	$201,000,000
Bond accounts	$593,000,000
Balanced	$3,858,000,000
Minimum separate account	$25,000,000

Brinson Partners Inc.'s international equity assets were committed most heavily to Japan, the U.K., West Germany, Canada and France as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Japan, the U.K., West Germany and Canada.



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Of the U.S. institutional tax-exempt assets invested abroad, $6.586 billion is managed actively and $233 million is in active passive strategies.

Analysts or portfolio managers are stationed in Chicago, London and Tokyo.

The firm emphasizes fundamental economic value based on cash flow analysis. It uses a disciplined top-down decision process, with broad diversification both within and across countries. Emphasis also is placed on risk control. Extensive use is made of quantitative tools.

The firm is registered with the SEC.

Gary P. Brinson is chief investment officer; Edward C. Hamill is client contact.

Brown Brothers Harriman

59 Wall St., New York, N.Y. 10005;
(212) 483-1818

Total assets managed	$13,177,000,000*
Non-U.S. pension assets	$85,000,000
U.S. tax-exempt assets managed	
Total	$5,586,000,000
International	$463,000,000
Equity accounts	$458,000,000
Bond accounts	$5,000,000
Minimum separate account	$5,000,000

* *data are as of Dec. 31*

Brown Brothers Harriman & Co.'s international equity assets were committed most heavily to Japan, West Germany, the U.K., France and Italy.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in New York, London and Tokyo.

The firm is a growth-oriented investor, with an objective of long-term capital appreciation. It applies a relative valuation discipline to market and stock selections. The firm emphasizes investments in countries where growth rates are likely to be greater than the United States and where political background and economic factors favor continuation of business development and expansion.

Elbridge T. Gerry Jr. is chief investment officer; Paul A. Legvold is client contact.

Burgess Capital Corp.

499 Seaport Court, Redwood City,
Calif. 94063; (415) 369-4545

Total assets managed	$284,000,000
Non-U.S. pension assets	$74,000,000
U.S. tax-exempt assets managed	
Total	$203,000,000
Global	$203,000,000
Equity accounts	$200,000,000
Balanced	$3,000,000
Minimum separate account	$3,000,000

Burgess Capital Corp.'s global equity assets were committed most heavily to the U.S., Malaysia, Singapore, France and Spain as of March 31.

Analysts or portfolio managers are stationed in Redwood City, Calif.

The firm's market weightings are determined by global analysis of economic, fiscal, political and market cycle factors; particular emphasis is placed on country and industry growth projections. Investments are heavily concentrated in economies and industries that are exhibiting high rates of growth.

The firm has been been registered with the SEC since 1976.

Robert F. Burgess is chief investment officer; Robert F. Osborne is client contact.

Top 50 managers of international account assets*

	U.S. $ mils.
State Street Bank	7,388
Baring Int'l Investment	3,606
Capital Guardian Trust	3,600
Rowe Price-Fleming Int'l	3,051
J.P. Morgan Investment	2,917
Schroder Capital	2,780
Morgan Grenfell Investment	2,482
Wells Fargo Nikko	2,362
Grantham Mayo v. Otterloo	2,360
Brinson Partners	2,167
Nomura Capital	2,114
Morgan Stanley Asset	1,815
Oechsle Int'l Advisors	1,788
Bankers Trust Investment	1,538
Batterymarch Financial	1,476
Chase Investors	1,415
WorldInvest	1,225
GE Investment	1,089
Alliance Capital	1,048
Boston Int'l Advisors	1,032
Acadian Asset	1,010
Hill Samuel/IA	845
Travelers	838
Warburg Investment	806
Scudder, Stevens & Clark	782
Julius Baer Investment	676
Dimensional Fund Advisors	602
Mellon-Pictet Int'l	572
IDS Int'l	556
PanAgora Asset	490
HD Int'l	488
Brown Brothers Harriman**	463
Fidelity Mgmt. Trust	459
Marsh/Cunningham-Castegren	454
SBC Portfolio Mgmt. Int'l	452
Arnhold & S. Bleichroeder	450
Wellington Mgmt.	438
Globe Finlay	431
N.M. Rothschild Int'l	429
GT Capital	420
PCM Int'l	397
Daiwa Int'l Capital	388
ANB Investment	307
Citicorp Investment	303
Axe Core Investors	295
Nikko Capital	269
CIGNA Asset Advisers	253
Beutel, Goodman Int'l	246
Capital Research & Mgmt.	245
Philippe Investment	243
Total	**61,880**

*U.S., institutional, discretionary, tax-exempt assets.
**As of Dec. 31

BZW Investment Management

P.O. Box 439, Seal House, 1 Swan
Lane, London EC4R 3UD U.K.;
071-623-7777

Total assets managed	$39,774,000,000*
Non-U.S. pension assets	$39,660,000,000
U.S. tax-exempt assets managed	
Total	$114,000,000
Global	$114,000,000
Minimum separate account	$25,000,000

* *data are as of Dec. 31*

BZW Investment Management's global equity assets were committed most heavily to West Germany, Japan, the U.S., the U.K. and Austria.

Analysts or portfolio managers are stationed in London, Tokyo, New York, Paris, Amsterdam, Madrid, Hong Kong, Chicago, Seoul, Bangkok, Manila, Singapore, Taipei and Auckland.

Crucial to the firm's investment approach is the development of a benchmark to reflect each client's risk return tolerance. This then determines the optimum asset allocation and stock selection process. The firm specializes in risk management and generally applies an index trackup or core satellite approach to stock selection.

The firm, a subsidiary of Barclays Bank PLC, has been registered with the SEC since 1981.

Donald Brydon is chief investment officer; Jane Platt is client contact.

C

Capital Guardian Trust Co.

333 S. Hope St., Los Angeles, Calif.
90071; (213) 486-9200

Total assets managed	$20,239,000,000
Non-U.S. pension assets	$218,000,000
U.S. tax-exempt assets managed	
Total	$19,552,000,000
International	$3,600,000,000
Equity accounts	$3,512,000,000
Bond accounts	$88,000,000
Global	$841,000,000
Equity accounts	$762,000,000
Bond accounts	$34,000,000
Balanced	$45,000,000
Minimum separate account	$10,000,000

Capital Guardian Trust Co.'s international equity assets were committed most heavily to Japan, the U.K., West Germany, Australia and France as of March 31.

As of the same date, its global equity assets were committed most heavily to Japan, the U.S., the U.K., West Germany and Switzerland.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in Los Angeles, San Francisco, New York, Washington, London, Geneva, Tokyo, Hong Kong and Singapore.

The firm uses a fundamental, value-oriented approach based on thorough, detailed research supported by direct management contacts. An additional focus is provided by portfolio managers and analysts with country or area economic, political and social overview responsibilities.

The firm is a subsidiary of the Capital Group Inc.

Robert Ronus is chief investment officer; John Seiter is client contact.

Capital Research & Management Co.

333 S. Hope St., Los Angeles, Calif.
90071; (213) 486-9200

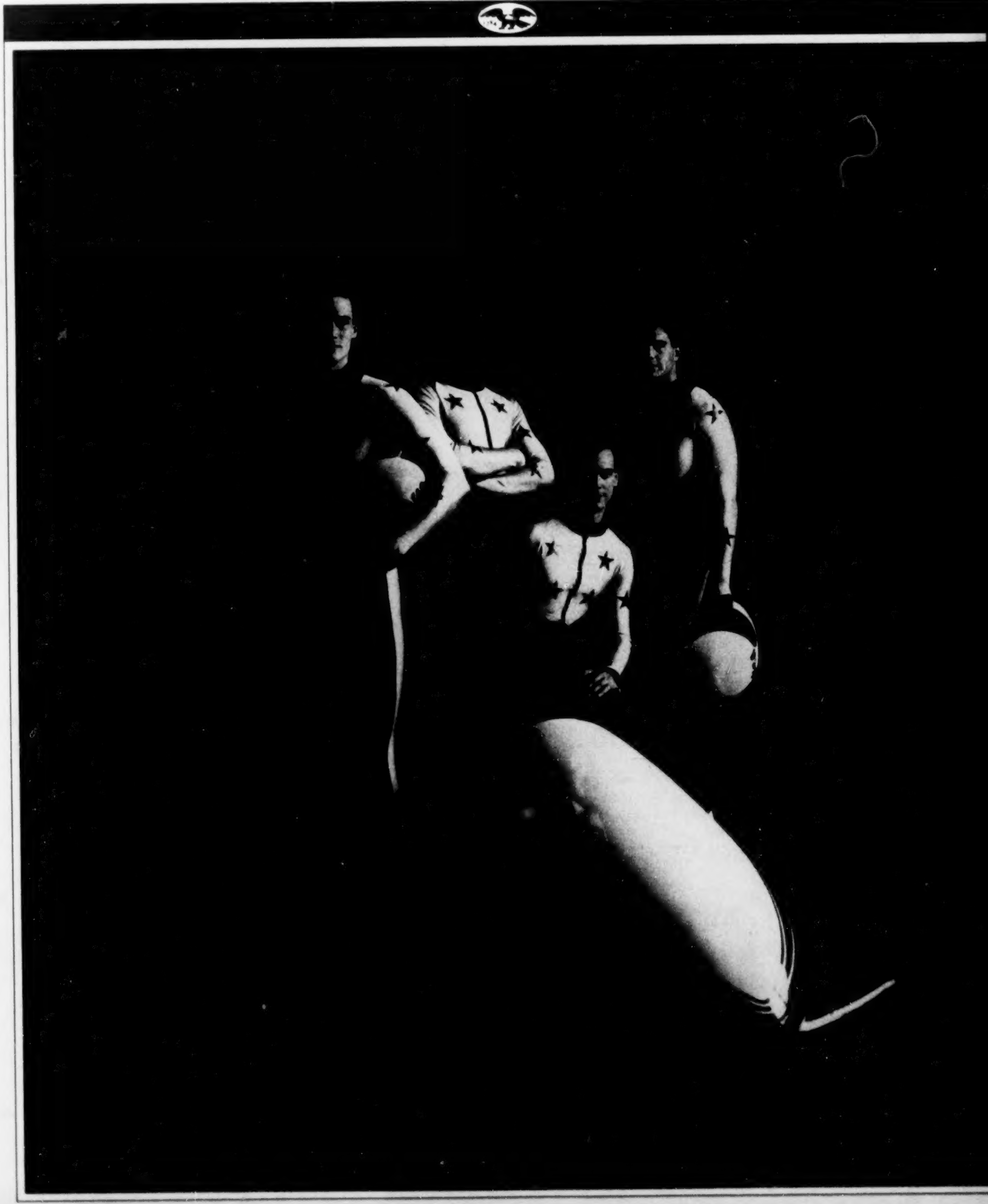
Total assets managed	$30,000,000,000
U.S. tax-exempt assets managed	
Total	$10,300,000,000
International	$245,000,000
Equity accounts	$202,000,000
Bond accounts	$2,000,000
Global	$361,000,000
Equity accounts	$298,000,000
Bond accounts	$13,000,000

Capital Research & Management Co.'s international equity assets were committed most heavily to the U.K., West Germany, Japan, Switzerland, Australia and the Netherlands as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., West Germany, the U.K., Japan and Australia.

All the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in Los Angeles, San Francisco, New York, London, Geneva, Tokyo, Hong Kong and Singapore.



Capital Guardian's approach is fundamental, guided by thorough internal research and analysis based on extensive field work and direct company contact. The firm tries to identify the difference between the underlying value of a company and the market price of its securities.

The firm, a subsidiary of the Capital Group Inc., has been registered with the SEC since 1933.

R. Michael Shanahan is chief investment officer; Benjamin H. Shattuck is client contact.

Chase Investors Management Corp.

1211 Avenue of the Americas, 37th Floor, New York, N.Y. 10036; (212) 730-3359

Total assets managed	$33,865,000,000
U.S. tax-exempt assets managed	
Total	$17,850,000,000
International	$1,415,000,000
Equity accounts	$1,155,000,000
Bond accounts	$260,000,000
Global	$5,000,000
Bond accounts	$5,000,000
Minimum separate account	$10,000,000

Of the $1.42 billion in U.S. institutional tax-exempt assets Chase Investors Management Corp. invests abroad, $265 million is managed actively, $85 million is active/passive, and $1.07 billion, passively.

Analysts or portfolio managers are stationed in New York and London.

The firm uses quantitative methods to determine appropriate country and currency allocations for actively managed international equity portfolios. Actively managed international and global fixed-income portfolios follow a top-down approach assessing the impact of expected changes in inflation and current account balances on bond and currency markets.

The firm, a subsidiary of Chase Manhattan Corp., been registered with the SEC since 1972.

Michael L. Schonberg is chief investment officer; Kinne S. Yon is client contact.

CIGNA Asset Advisers Inc.

900 Cottage Grove Road, S-208, Hartford, Conn. 06152; (203) 726-6000

Total assets managed	$4,357,000,000
Non-U.S. pension assets	$154,000,000
U.S. tax-exempt assets managed	
Total	$253,000,000
International	$253,000,000
Equity accounts	$233,000,000
Bond accounts	$20,000,000
Minimum separate equity account	$10,000,000
Minimum separate bond account	$25,000,000

CIGNA Asset Advisers Inc.'s international equity assets were committed most heavily to West Germany, France, Italy, the U.K. and Switzerland as of March 31.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in London, Tokyo and Sydney.

The firm's investment approach is top-down, beginning with a framework of macroeconomic expectations. It then identifies geographic regions and industry sectors that stand to benefit from those expectations and selects the best risk-adjusted prospects. High-quality, liquid stocks are emphasized. Expected currency movements are managed as part of the geographic and cash allocation decision.

The firm, a subsidiary of CIGNA Corp., been registered with the SEC since 1967.

George R. Trumbull is chief investment officer; Timothy Nicholson is client contact.

Citicorp Investment Management

153 E. 53rd St., 22nd Floor, New York, N.Y. 10043; (212) 559-9140

Total assets managed	$23,533,000,000
Non-U.S. pension assets	$962,000,000
U.S. tax-exempt assets managed	
Total	$336,000,000
International	$303,000,000
Equity accounts	$296,000,000
Bond accounts	$7,000,000
Global	$33,000,000
Equity accounts	$16,000,000
Bond accounts	$17,000,000
Minimum separate account	$10,000,000

Citicorp Investment Management's international equity assets were committed most heavily to the U.K., West Germany, France, Japan and Switzerland as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.K., West Germany, France, Japan and the U.S.

All of the U.S. institutional tax-exempt assets invested abroad are run in actively managed strategies.

Analysts or portfolio managers are stationed in London, New York, Tokyo, Sydney, Hong Kong, Frankfurt, Zurich, Paris, Vienna, Sao Paulo, Auckland, Madrid, Santiago and Bombay.

Its active equity approach is based on a centralized global asset allocation process with security selection completed by regional market specialists. Its approach is active, with a centralized country allocation process and a heavy emphasis on currency and duration management.

The firm is a subsidiary of Citibank.

Anthony Watson is chief investment officer; Carolyn A. Peoples is client contact.

Firms assigning assets to others*

	U.S. $ mils.
Strategic Investment Partners	3,958
Vanguard Group	1,385
Frank Russell Trust	649
FX Concepts**	260
RCB Trust	227
John Hancock Financial	16

*U.S., institutional, discretionary, tax-exempt assets
**Currency hedger

County NatWest Investment Management

100 Wall St., New York, N.Y. 10005; (212) 440-8565

Total assets managed	$18,500,000,000
Non-U.S. pension assets	$17,500,000,000
U.S. tax-exempt assets managed	
Total	$367,000,000
International	$40,000,000
Equity accounts	$40,000,000
Global	$327,000,000
Equity accounts	$190,000,000
Bond accounts	$21,000,000
Balanced	$116,000,000
Minimum separate account	$15,000,000

County NatWest Invest Management's international equity assets were committed most heavily to Japan, France, the Netherlands and West Germany as of March 31.

Of the U.S. institutional tax-exempt assets invested abroad, $51 million is managed actively and $316 million is in active/passive strategies.

Analysts or portfolio managers are stationed in Tokyo, London, Hong Kong, Channel Islands, Melbourne and Sydney.

The firm's international diversification program uses active market allocation — through the application of fundamental, subjective proprietary baskets of stocks — with quantitative techniques used to monitor and control risk.

The firm, a subsidiary of National Westminster Bank PLC, is registered with the SEC.

Nigel Lester is chief investment officer; Lynne S. Minard is client contact.

D

Daiwa International Capital Management Corp.

1 World Financial Center, 200 Liberty St., New York, N.Y. 10281; (212) 341-5405

Total assets managed	$14,615,000,000
Non-U.S. pension assets	$4,223,000,000
U.S. tax-exempt assets managed:	
Total	$388,000,000
International	$388,000,000
Equity accounts	$388,000,000
Minimum separate account	$5,000,000

Daiwa International Capital Management Corp.'s international equity assets were committed most heavily to Japan, West Germany, Singapore, France and the U.K. as of March 31.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in Tokyo, London, New York, Hong Kong and Singapore.

The firm is a research-oriented active manager specializing in Pacific Basin investments. Stock selection focuses on a company's long-term growth potential and the relative value of its stock price. Local managers invest in their respective regions.

The firm, a subsidiary of Daiwa International Capital Management Co. Ltd., been registered with the SEC since 1981.

Shunsuke Ichijo is chief investment officer; Jay S. Mancus is client contact.

Dimensional Fund Advisors

1299 Ocean Ave., Suite 650, Santa Monica, Calif. 90401; (213) 395-8005

Total assets managed	$5,434,000,000
Non-U.S. pension assets	$292,000,000
U.S. tax-exempt assets managed:	
Total	$4,982,000,000
International	$602,000,000
Equity accounts	$602,000,000
Global	$1,383,000,000
Equity accounts	$1,383,000,000
Minimum separate account	$25,000,000

Dimensional Fund Advisors Inc.'s international equity assets were committed most heavily to Japan, the U.K., France, West Germany and Italy as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Japan, the U.K., France and West Germany.

All of the U.S. institutional tax-exempt assets invested abroad are managed passively.

Analysts or portfolio managers are stationed in Santa Monica and London.

The firm provides small-company investing in the four major international markets.

It has been registered with the SEC since 1981.

Rex A. Sinquefield is chief investment officer; David G. Booth is client contact.

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Discount Corp. of New York Advisers

58 Pine St., New York, N.Y. 10005;
(212) 248-8989

Total assets managed	$6,000,000,000
U.S. tax-exempt assets managed:	
Total	$6,000,000,000
Global	$300,000,000
Bond accounts	$300,000,000
Minimum separate account	$25,000,000

All of Discount Corp. of New York Advisers' U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in New York.

The firm takes a conservative, active approach, changing the market risk profile of holdings to reflect the probable direction of interest rates. The assets of global portfolios are allocated strategically among major country markets. The investment style has three major focuses: team management, high quality credit and active and defensive management of market risk.

The firm, a subsidiary of Discount Corp. of New York, been registered with the SEC since 1978.

Patricia Klink is chief investment officer and client contact.

Master trust: Oct. 1

Dunedin Fund Managers Ltd.

1010 Sherbrooke St. West, Suite
1512, Montreal, Quebec H3A 2R7;
(514) 499-9348

Total assets managed	$4,778,000,000
Non-U.S. pension assets	$1,633,000,000
U.S. tax-exempt assets managed:	
Total	$212,000,000
International	$120,000,000
Equity accounts	$120,000,000
Global	$59,000,000
Equity accounts	$59,000,000

Dunedin Fund Managers Ltd.'s international equity assets were committed most heavily to Japan, the U.K., West Germany, France and Switzerland as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Japan, the U.K., West Germany and France.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in Edinburgh.

The firm is a long-term investor seeking fundamental value in markets and stocks, emphasizing high-quality companies with sound management and attractive growth prospects.

The firm has been registered with the SEC since 1985.

Alan S. Kemp is chief investment officer; Douglas Waggoner is client contact.

F

Fidelity Management Trust

82 Devonshire St., Boston, Mass.
02109; (617) 570-6161

Total assets managed	$10,656,000,000
Non-U.S. pension assets	$277,000,000
U.S. tax-exempt assets managed:	
Total	$9,328,000,000
International	$459,000,000
Equity accounts	$459,000,000
Global	$194,000,000
Equity accounts	$194,000,000
Minimum separate account	$25,000,000

Fidelity Management Trust Co.'s international equity assets were committed most heavily to Japan, the U.K., West Germany, France and Norway as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Japan, the U.K., West Germany and France.

All of the U.S. institutional tax-exempt assets invested abroad are actively/passively managed.

Analysts or portfolio managers are stationed in Boston, London, Tokyo, Hong Kong, Taipei and Sydney.

The firm combines active bottom-up stock selection with quantitative, risk-controlled portfolio management.

The firm is a subsidiary of FMR Corp.

Alexander Webb III is chief investment officer; Eugene M. Waldron is client contact.

Fiduciary Trust Co. International

2 World Trade Center, New York, N.Y.
10048; (212) 466-4100

Total assets managed	$10,005,000,000
Non-U.S. pension assets	$566,000,000
U.S. tax-exempt assets managed:	
Total	$958,000,000
International	$79,000,000
Equity accounts	$70,000,000
Bond accounts	$9,000,000
Global	$879,000,000
Bond accounts	$879,000,000
Minimum separate account	$10,000,000

Fiduciary Trust Co. International's international equity assets were committed most heavily to Japan, West Germany, the Netherlands, France and Switzerland as of March 31.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in New York.

The firm's disciplined investment style begins with a formal review of each major market, involving a series of decisions regarding country and currency weightings. Asset allocation decisions are made jointly by staff in London, Geneva, Hong Kong and New York.

Jeremy H. Biggs is chief investment officer; George J. Mullen Jr. is client contact.

FX Concepts Inc.

100 Maiden Lane, New York, N.Y.
10038; (212) 363-7540

Minimum separate account	$15,000,000

FX Concepts Inc. managed $260 million in currency hedging programs for U.S. institutional tax-exempt clients as of March 31. The firm does not manage any of the underlying assets.

Its approach to foreign exchange management is based on the signals of its proprietary technical and quantitative model.

Analysts are stationed in New York, Rochester and Washington.

The firm has been registered with the SEC since 1986.

John R. Taylor Jr. is chief investment officer; John H. Serhant is client contact.

G

GE Investments

3003 Summer St., Stamford, Conn.
06904; (203) 326-2316

Total assets managed	$34,791,000,000
U.S. tax-exempt assets managed:	
Total	$23,145,000,000
International	$1,089,000,000
Equity accounts	$939,000,000
Bond accounts	$150,000,000
Minimum separate account	$10,000,000

GE Investments' international equity assets were committed most heavily to Japan, West Germany, the U.K., France and Hong Kong as of March 31.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in Stamford and London.

The firm uses a top-down/bottom-up approach to find countries with favorable economic climates and companies that demonstrate potential for strong earnings growth and whose worth has not been fully recognized by the market. Its focus is on long-term market cycles and medium- to large-size companies. A two- to five-year horizon is used, with low turnover.

The firm, a subsidiary of General Electric Co., has been registered with the SEC since 1988.

Arthur S. Bahr is chief investment officer; Geoffrey R. Norman is client contact.

Globe Finlay Inc.

200 Park Ave., 56th Floor, New York,
N.Y. 10166; (212) 557-7022

Total assets managed	$1,400,000,000
Non-U.S. pension assets	$358,000,000
U.S. tax-exempt assets managed:	
Total	$683,000,000
International	$431,000,000
Equity accounts	$431,000,000
Global	$252,000,000
Equity accounts	$245,000,000
Balanced	$7,000,000
Minimum separate account	$20,000,000

Globe Finlay Inc.'s international equity assets were committed most heavily to Japan, West Germany, Switzerland, Hong Kong and the Netherlands as of March 31.

As of the same date, its global equity assets were committed most heavily to Japan, the U.S., West Germany, Switzerland and the U.K.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in New York, London, Tokyo and Geneva.

The firm manages active equity portfolios with global, EAFE, Europe-only, Japan-only and Pacific Basin mandates. The investment process is top-down/bottom-up with stock selection based on identifying well-managed companies with credible, sustainable growth rates and that are valued attractively according to local market criteria.

The firm has been registered with the SEC since 1982.

Francis Finlay is chief investment officer and client contact.

Grantham, Mayo, Van Otterloo & Co.

40 Rowes Wharf, Boston, Mass.
02110; (617) 330-7610

Total assets managed	$7,320,000,000
Non-U.S. pension assets	$524,000,000
U.S. tax-exempt assets managed:	
Total	$6,366,000,000
International	$2,361,000,000
Equity accounts	$2,361,000,000
Global	$243,000,000
Equity accounts	$243,000,000
Minimum separate account	$50,000,000

Grantham, Mayo, Van Otterloo & Co.'s international equity assets were committed most heavily to the U.K., the Netherlands, West Germany, Australia and France as of March 31.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in Boston and London.

The firm follows a value approach to investing. Quantitative models are used for stock selection and country allocation.

The firm been registered with the SEC since 1977.

Eyk Van Otterloo is chief investment officer; Susan Randall Harvey is client contact.

GT Capital Management Inc.

50 California St., 27th Floor, San
Francisco, Calif. 94111; (415)
392-6181

Total assets managed	$9,768,000,000
Non-U.S. pension assets	$1,383,000,000
U.S. tax-exempt assets managed:	
Total	$420,000,000
International	$420,000,000
Equity accounts	$420,000,000
Minimum separate account	$10,000,000

GT Capital Management Inc.'s international equity assets were committed most heavily to West Germany, Singapore, Japan, France and the Netherlands as of March 31.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

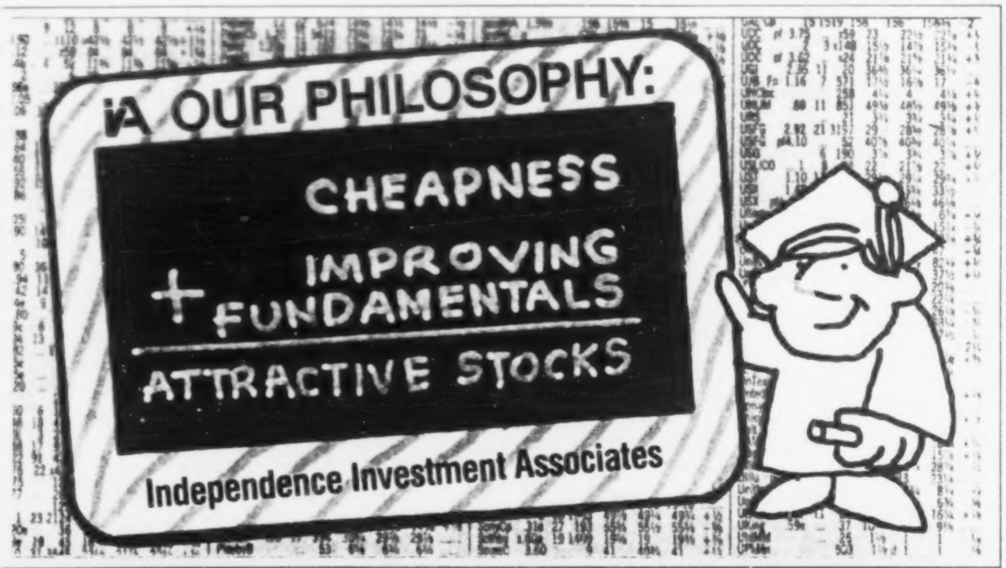
Analysts or portfolio managers are stationed in San Francisco, London, Tokyo, Hong Kong and Sydney.

The firm's active equity approach emphasizes early identification of major international trends, targeting countries and companies where undiscounted earnings growth will yield above-average return. Currency hedging is used defensively, to protect returns from currency fluctuations.

The firm, a subsidiary of GT Management PLC, been registered with the SEC since 1974.

Christian Wignall is chief investment officer; Earle A. Malm II is client contact.

Computer software: Aug. 6



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A division of The Bank of California

Greg King, Senior Vice President
John Balasz, Vice President
[illegible] Wilshire Boulevard, Los Angeles, California 90017
Telephone 213/621-1393

H

D International Inc.

26 E. 56th St., New York, N.Y.
10022; (212) 753-0600

tal assets managed	$1,068,000,000
on-U.S. pension assets	$573,000,000
S. tax-exempt assets managed:	
Total	$495,000,000
nternational	$488,000,000
Equity accounts	$447,000,000
Balanced	$41,000,000
Global	$7,000,000
Equity accounts	$7,000,000
nimum separate account	$20,000,000

HD International Inc.'s international equity assets re committed most heavily to Japan, West Ger- any, France, Switzerland and Holland as of March . As of the same date, its global equity assets re committed most heavily to the U.S., Japan, est Germany and France.

Of the U.S. institutional tax-exempt assets in- sted abroad, $440 million is managed actively d $55 million is in active/passive strategies.

Analysts or portfolio managers are stationed in ndon.

The firm uses a top-down, earnings-driven ap- oach to country/stock selection with strict valua- n discipline. Proprietary quantitative models are ed for market allocations. Portfolios concentrate three or four markets; total allocation is eight to markets. Stocks are chosen using rnings-driven screening and valuation criteria for e world excluding Japan; quant methods are used Japan.

The firm, a subsidiary of HD International Ltd., en registered with the SEC since 1987.

James Heyworth-Dunne is chief investment offi- r; Francine R. Elster is client contact.

ill Samuel/Investment Advisers Ltd.

00 Dain Tower, Box 357,
Minneapolis, Minn. 55440; (612)
371-7780

tal assets managed	$859,000,000
S. tax-exempt assets managed:	
Total	$859,000,000
nternational	$845,000,000
Equity accounts	$800,000,000
Balanced	$45,000,000
Global	$14,000,000
Equity accounts	$14,000,000
nimum separate account	$15,000,000

Hill Samuel/Investment Advisers Ltd.'s interna- nal equity assets were committed most heavily to stralia, Japan, West Germany, the Netherlands d the U.K. as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., the U.K., Japan, Australia and West Germany.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in London.

The firm employs a value approach to international and global investment.

The firm, a subsidiary of TSB Group PLC, has been registered with the SEC since 1984.

David Tilles is chief investment officer; Anne Holloran and I.P. "Kip" Knelman are client contacts.

I

IDS International Inc.

IDS Tower 10, Minneapolis, Minn.
55440; (612) 372-1335

Total assets managed	$1,242,000,000
Non-U.S. pension assets	$314,000,000
U.S. tax-exempt assets managed:	
Total	$665,000,000
International	$556,000,000
Equity accounts	$556,000,000
Global	$109,000,000
Equity accounts	$109,000,000
Minimum separate account	$15,000,000

IDS International Inc.'s international equity assets were committed most heavily to France, West Germany, Switzerland, Japan and Singapore as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., West Germany, France, Switzerland and Singapore.

Of the U.S. institutional tax-exempt assets invested abroad, $603 million is managed actively and $62 million is in active/passive strategies.

Analysts or portfolio managers are stationed in London and Minneapolis.

The firm takes a top-down/bottom-up approach. Based upon a macroeconomic, geopolitical overview, assets are allocated; currency views are taken; and countries are distributed into economic categories and weighted. Stock selection is based on fundamental analysis. The firm also offers a strategy in which stocks are selected passively through optimization designed to simulate a specified benchmark.

The firm, a subsidiary of IDS Financial Corp., an American Express company, been registered with the SEC since 1981.

Peter L. Lamaison is chief investment officer; Robert W. Edgar, Richard L. O'Hara, Gabrielle F. Parish, Stephen W. Roszell and Diane K. Vener are client contacts.

Interinvest Corp.

84 State St., Sixth Floor, Boston,
Mass. 02109; (617) 723-7870

Total assets managed	$125,000,000
U.S. tax-exempt assets managed:	
Total	$55,000,000
International	$15,000,000
Equity accounts	$12,000,000
Bond accounts	$3,000,000
Global	$40,000,000
Equity accounts	$35,000,000
Bond accounts	$5,000,000
Minimum separate account	$1,000,000

Interinvest Corp.'s international equity assets were committed most heavily to Singapore/Malaysia, Canada, Hong Kong, Australia and New Zealand as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Canada, Singapore/Malaysia, Hong Kong and Australia.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in Boston, Montreal and Zurich.

The firm uses a top-down global asset allocation approach using macroeconomic political and currency analysis to determine country, currency and sector weightings.

The firm has been registered with the SEC since 1980.

Hans P. Black is chief investment officer; Stanley T. Schmidt is client contact.

INVESCO MIM PLC

101 E. 52nd St., Manhattan Tower,
New York, N.Y. 10022; (212)
888-5820

Total assets managed	$16,000,000,000
Non-U.S. pension assets	$6,100,000,000
U.S. tax-exempt assets managed:	
Total	$336,000,000
International	$94,000,000
Equity accounts	$94,000,000
Global	$242,000,000
Equity accounts	$130,000,000
Bond accounts	$26,000,000
Balanced	$86,000,000
Minimum separate account	$10,000,000

INVESCO MIM PLC's international equity assets were committed most heavily to Japan, the U.K., West Germany, France and Switzerland as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Japan, the U.K., West Germany and France.

All U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in Atlanta, London, Tokyo and Hong Kong.

Asset allocation and country weightings are determined on a top-down basis; security selection is based on company fundamentals in local markets. The equity approach uses value and sector rotation; the fixed-income strategy is determined by analysis of relative liquidity and available real yields.

The firm has been registered with the SEC since 1978.

Donald Walker is chief investment officer; Frank Keeler is client contact.

Real estate directory: Sept. 3

L

Lexington Management

Park 80 West, Plaza Two, Saddle
Brook, N.J. 07662; (201) 845-7300

Total assets managed	$2,352,000,000
U.S. tax-exempt assets managed:	
Total	$1,128,000,000
Global	$94,000,000
Equity accounts	$94,000,000
Minimum separate account	$10,000,000

Lexington Management Corp.'s global equity assets were committed most heavily to the U.S., Japan, the U.K., West Germany and France as of March 31.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in Saddle Brook.

The firm treats equities worldwide as a single asset class. It attempts to isolate the best ideas — stocks, themes, sectors, countries or currencies — in its investment strategies.

The firm, a subsidiary of Piedmont Management Co., has been registered with the SEC since 1952.

William S. Stack is chief investment officer; Joseph Barcic Jr. is client contact.

Global custody and master trust will be highlighted in the Oct. 1 issue of *Pensions & Investments*.

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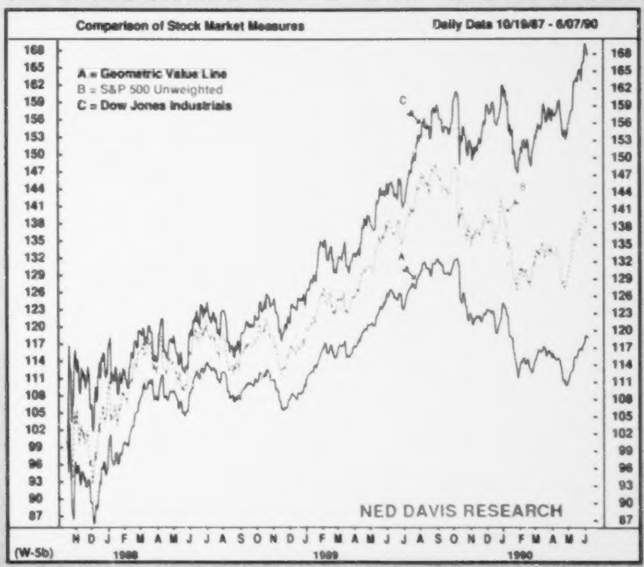

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Private Equity Perspectives

by Linda Vincent
Vice President, Investor Services
Venture Economics, Inc.

Venture Capital Signposts for the 1990s

The last decade witnessed skyrocketing growth in venture capital private placements. In sharp contrast, the '90s promise to be a decade of slower, more cautious asset allocation decisions.

Should you increase or decrease your exposure in venture capital, or hold steady? Reliable industry benchmarks are signposts pointing the way to answers.

To position your portfolio advantageously with venture capital investments in an informed way, it's crucial that you:

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- Have access to distinct benchmarks with integrity and statistical reliability for early- and later-stage funds.

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For further information on ***Investment Benchmarks: Venture Capital***, call Linda Vincent at (617) 449-2100.

75 Second Avenue, Suite 700, Needham, Massachusetts 02194 VENTURE ECONOMICS

Lombard Odier International Portfolio Management Ltd.

Norfolk House, 13 Southampton
Place, London WC1A 2AJ U.K.;
071-831-2350

Total assets managed	$3,256,000,000
Non-U.S. pension assets	$184,000,000
U.S. tax-exempt assets managed:	
Total	$246,000,000
International	$178,000,000
Equity accounts	$48,000,000
Bond accounts	$130,000,000
Global	$69,000,000
Equity accounts	$69,000,000
Minimum separate account	$10,000,000

Lombard Odier International Portfolio Management Ltd.'s international equity assets were committed most heavily to Japan, West Germany, the U.K., France and Italy as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Japan, the U.K., West Germany and France.

All U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in Geneva, Montreal and Amsterdam.

The firm uses a macroeconomic approach to regional allocation of assets. Portfolio managers analysts implement equity allocation within their geographic regions. Interest rate anticipation is used in fixed income. Currency hedging is used.

The firm, a subsidiary of Lombard Odier & Cie, has been registered with the SEC since 1978.

Robert van Maasdijk is chief investment officer; Karin Bonding is client contact.

Marathon Asset Management Ltd.

140A Gloucester Mansions,
Cambridge Circus, London WC2H
8HD U.K.; 071-497-2211

Total assets managed	$250,000,000
Non-U.S. pension assets	$17,000,000
U.S. tax-exempt assets managed:	
Total	$55,000,000
International	$12,000,000
Equity accounts	$12,000,000
Global	$43,000,000
Equity accounts	$43,000,000
Minimum separate account	$25,000,000

Marathon Asset Management Ltd.'s international equity assets were committed most heavily to Japan, the U.K., France, West Germany and Singapore as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Japan, the U.K., France and West Germany.

All U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in London.

The firm's approach, based on fundamental research, uses monetary trends and confidence levels to determine asset allocation while capital cycles are used to identify industries. Risk is minimized by avoiding extreme bets against benchmark country allocations.

The firm has been registered with the SEC since 1990.

Jeremy J. Hosking is chief investment officer; Helen Blanchard is client contact.

Profiles of the top consultants will appear in the Nov. 12 edition.

Marsh & Cunningham-Castegren International

P.O. Box 1961, Boston, Mass. 02105;
(617) 482-0290

Total assets managed	$591,000,000
U.S. tax-exempt assets managed:	
Total	$454,000,000
International	$454,000,000
Equity accounts	$454,000,000
Minimum separate account	$20,000,000

Marsh & Cunningham — Castegren International's international equity assets were committed most heavily to the U.K., France, Japan, Sweden and Hong Kong as of March 31.

All U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in Boston.

The firm uses top-down country allocation in conjunction with worldwide economic themes. Bottom-up stock selection is guided by a p/e data base.

The firm, a subsidiary of Marsh & Cunningham Inc., has been registered with the SEC since 1984.

Hakan Castegren is chief investment officer; Edward E. Wendell Jr. is client contact.

Foreign business survey: July 23.

Marvin & Palmer Associates

1 Commerce Center, Suite 1100,
Wilmington, Del. 19801; (302)
573-3570

Total assets managed	$340,000,00
U.S. tax-exempt assets managed:	
Total	$340,000,00
International	$190,000,00
Equity accounts	$190,000,00
Global	$140,000,00
Equity accounts	$140,000,00
Minimum separate account	$10,000,00

Marvin & Palmer Associates Inc.'s internation equity assets were committed most heavily Japan, West Germany, France, Sweden, Norwa and the U.K. as of March 31.

As of the same date, its global equity assets we committed most heavily to the U.S., West German Japan, Sweden and the U.K.

All U.S. institutional tax-exempt assets invest abroad are managed actively.

Analysts or portfolio managers are stationed Wilmington, Brussels and Minneapolis.

The firm uses a top-down approach focusing a country/currency theme and individual stocks. combination of fundamental and technical analys is used.

The firm has been registered with the SEC sin 1986.

David Marvin is chief investment officer; Jon St lonius is client contact.

Massachusetts Financial Services

500 Boylston St., Boston, Mass.
02116; (617) 954-5000

Total assets managed	$25,198,000,0
U.S. tax-exempt assets managed:	
Total	$2,037,000,0
Global	$210,000,0
Bond accounts	$210,000,0
Minimum separate account	$20,000,0

All of the discretionary U.S. tax-exempt asse invested abroad by Massachusetts Financial Se vices are managed actively.

Analysts or portfolio managers are stationed Boston.

The firm applies active fixed-income manageme techniques and uses hedging to segment non-doll fixed-income investments into three components currency return, bond price fluctuations and curre income — and to isolate factors that will provide t most attractive return.

The firm, a subsidiary of Sun Life Assurance C of Canada, been registered with the SEC sin 1933.

A. Keith Brodkin is chief investment office James H. Kelly Jr. and Eileen M. McCaffery a client contacts.

Mellon-Pictet International Management Ltd.

Cutlers Gardens, 5 Devonshire
Square, London, EC2M 4LD, U.K.;
071-283-7471

Total assets managed	$895,000,0
Non-U.S. pension assets	$323,000,0
U.S. tax-exempt assets managed:	
Total	$572,000,0
International	$572,000,0
Equity accounts	$572,000,0

Mellon-Pictet International Management L manages all of its U.S. institutional tax-exem assets invested abroad actively.

Analysts or portfolio managers are stationed Geneva and Tokyo.

The firm uses a systematic, disciplined stock s lection technique linking share value to fundame tals that identifies shares representing the be value relative to their historical valuation within ea market.

A more judgmental technique is used in worki with regional mandates and international small-c accounts.

The firm, a joint venture of Pictet et Cie and M lon Bank, has been registered with the SEC sin 1980.

Dan Blanks is chief investment officer; Rod Hea is client contact.

J.P. Morgan Investment Management Inc.

522 Fifth Ave., New York, N.Y. 1003
(212) 837-2300

Total assets managed	$60,285,000,0
Non-U.S. pension assets	$460,000,0
U.S. tax-exempt assets managed:	
Total	$35,350,000,0
International	$2,917,000,0
Equity accounts	$1,598,000,0
Bond accounts	$1,128,000,0
Balanced	$191,000,0
Global	$335,000,0
Equity accounts	$171,000,0
Bond accounts	$164,000,0

J.P. Morgan Investment Management Inc.'s U. institutional tax-exempt assets invested abroad managed actively.

Analysts or portfolio managers are stationed New York, London, Singapore, Tokyo and M bourne.

The firm actively manages asset mix, curren exposure and security selection to maximize t return and minimize risk in U.S. dollars through systematic decision-making process.

The firm, a subsidiary of J.P. Morgan & C has been registered with the SEC since 1984.

David L. Brigham is chief investment officer; Jo F. Baumann is client contact.

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Morgan Grenfell Investment Services Ltd.

20 Finsbury Circus, London EC2M
1NB U.K.; 071-256-7500

Total assets managed	$2,770,000,000
Non-U.S. pension assets	$93,000,000
U.S. tax-exempt assets managed:	
Total	$2,631,000,000
International	$2,482,000,000
Equity accounts	$2,328,000,000
Bond accounts	$83,000,000
Balanced	$71,000,000
Global	$149,000,000
Equity accounts	$16,000,000
Bond accounts	$133,000,000
Minimum separate account	$10,000,000

Morgan Grenfell Investment Services Ltd.'s international equity assets were committed most heavily to Japan, the U.K., West Germany, Switzerland and the Netherlands as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Japan, West Germany, the U.K. and Switzerland.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in London, Tokyo, Geneva, Singapore, New York and Philadelphia.

In equities, the firm emphasizes stock selection with market and currency overlays. In fixed income, the firm actively manages currencies, bond markets and maturities. Currency and bond market exposure decisions are separated through currency hedging.

The firm, a subsidiary of Morgan Grenfell Asset Management, has been registered with the SEC since 1977.

Michael Bullock is chief investment officer; James E. Minnick is client contact in New York at (212) 230-2600.

Morgan Stanley Asset Management

1221 Avenue of the Americas, New
York, N.Y. 10020; (212) 296-7200

Total assets managed	$18,996,000,000
Non-U.S. pension assets	$127,000,000
U.S. tax-exempt assets managed:	
Total	$15,681,000,000
International	$1,815,000,000
Equity accounts	$1,815,000,000
Global	$1,080,000
Equity accounts	$197,000,000
Bond accounts	$457,000,000
Balanced	$426,000,000
Minimum separate account	$10,000,000

Morgan Stanley Asset Management's international equity assets were committed most heavily to the U.K., Japan, West Germany, the Netherlands and Switzerland as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., West Germany, Japan, the U.K. and Canada.

All U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in New York, London, Chicago, Hong Kong and Tokyo.

The firm's approach is bottom-up and value-oriented. Selection relies heavily on fundamental analysis and screening of international data bases. Currency decisions are made separately.

The firm, a subsidiary of Morgan Stanley Group Inc., has been registered with the SEC since 1981.

Barton M. Biggs is chief investment officer; Gail Hunt Reeke is client contact.

N

Nikko Capital Management (U.S.A.) Inc.

350 Park Ave., New York, N.Y. 10022;
(212) 319-2730

Total assets managed	$1,703,000,000
Non-U.S. pension assets	$20,000,000
U.S. tax-exempt assets managed:	
Total	$437,000,000
International	$269,000,000
Equity accounts	$269,000,000
Global	$168,000,000
Equity accounts	$168,000,000
Minimum separate account	$5,000,000

Nikko Capital Management (U.S.A.) Inc.'s international equity assets were committed most heavily to Japan, West Germany, the U.K., France and Switzerland as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Japan, West Germany, the U.K. and France.

Of the U.S. institutional tax-exempt assets invested abroad $135 million is managed actively, $40 million is managed in active/passive strategies and $262 million, passively.

Analysts or portfolio managers are stationed in New York, Tokyo, London and Singapore.

The firm offers active strategies for global, international and Pacific Basin portfolios. Quantitative models are used by active portfolio managers in the decision-making process.

Specialized products include EAFE and Pacific Basin Active strategies in addition to a Japan OTC and Pacific Basin Emerging Market strategy. Active fixed-income management is based on interest-rate anticipation.

The firm, a subsidiary of Nikko International Capital Management Co. Ltd., has been registered with the SEC since 1981.

Stanley Kirtman is chief investment officer; David Rochman is client contact.

Nomura Capital Management

180 Maiden Lane, Suite 2903, New
York, N.Y. 10038; (212) 509-8181

Total assets managed	$2,644,000,000
Non-U.S. pension assets	$514,000,000
U.S. tax-exempt assets managed:	
Total	$2,130,000,000
International	$2,114,000,000
Equity accounts	$2,025,000,000
Bond accounts	$48,000,000
Balanced	$41,000,000
Global	$13,000,000
Equity accounts	$13,000,000
Minimum separate account	$5,000,000

Nomura Capital Management Inc.'s international equity assets were committed most heavily to Japan, the U.K., West Germany, France and Switzerland as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Japan, the U.K., West Germany and France.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in London, New York, Washington, Tokyo, Osaka, Yokohama, Sydney, Hong Kong and Singapore.

The firm has global, non-U.S. or regional investments with a concentration in high-return sectors. Stocks are screened through original fundamental research and relative valuation. The emphasis is on sector and stock selection and less on timing markets and currencies. The process is disciplined and a number of quantitativa tools are used.

The firm, a subsidiary of Nomura Investment Management Co. Ltd, has been registered with the SEC since 1976.

Takeo Nakamura is chief investment officer; Brian X. Fitzgibbon is client contact.

O

Oechsle International Advisors

1 International Place, 44th Floor,
Boston, Mass. 02110; (617)
330-8810

Total assets managed	$1,851,000,000
Non-U.S. pension assets	$40,000,000
U.S. tax-exempt assets managed:	
Total	$1,788,000,000
International	$1,788,000,000
Equity accounts	$1,788,000,000
Minimum separate account	$20,000,000

Oechsle International Advisors' international equity assets were committed most heavily to Japan, the U.K., West Germany, Switzerland and France as of March 31.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in Boston, London and Tokyo.

The firm is a top-down, core and core-plus manager with active company and moderate cash allocation. Core portfolios are concentrated in medium- and large-capitalization stocks and core-plus, in smaller capitalization stocks.

The firm has been registered with the SEC since 1986.

Walter Oechsle is chief investment officer; Stephen P. Langer is client contact.

Public funds will be the focus of the Oct. 29 issue of *Pensions & Investments*.

P

Pacific Investment Management Co.

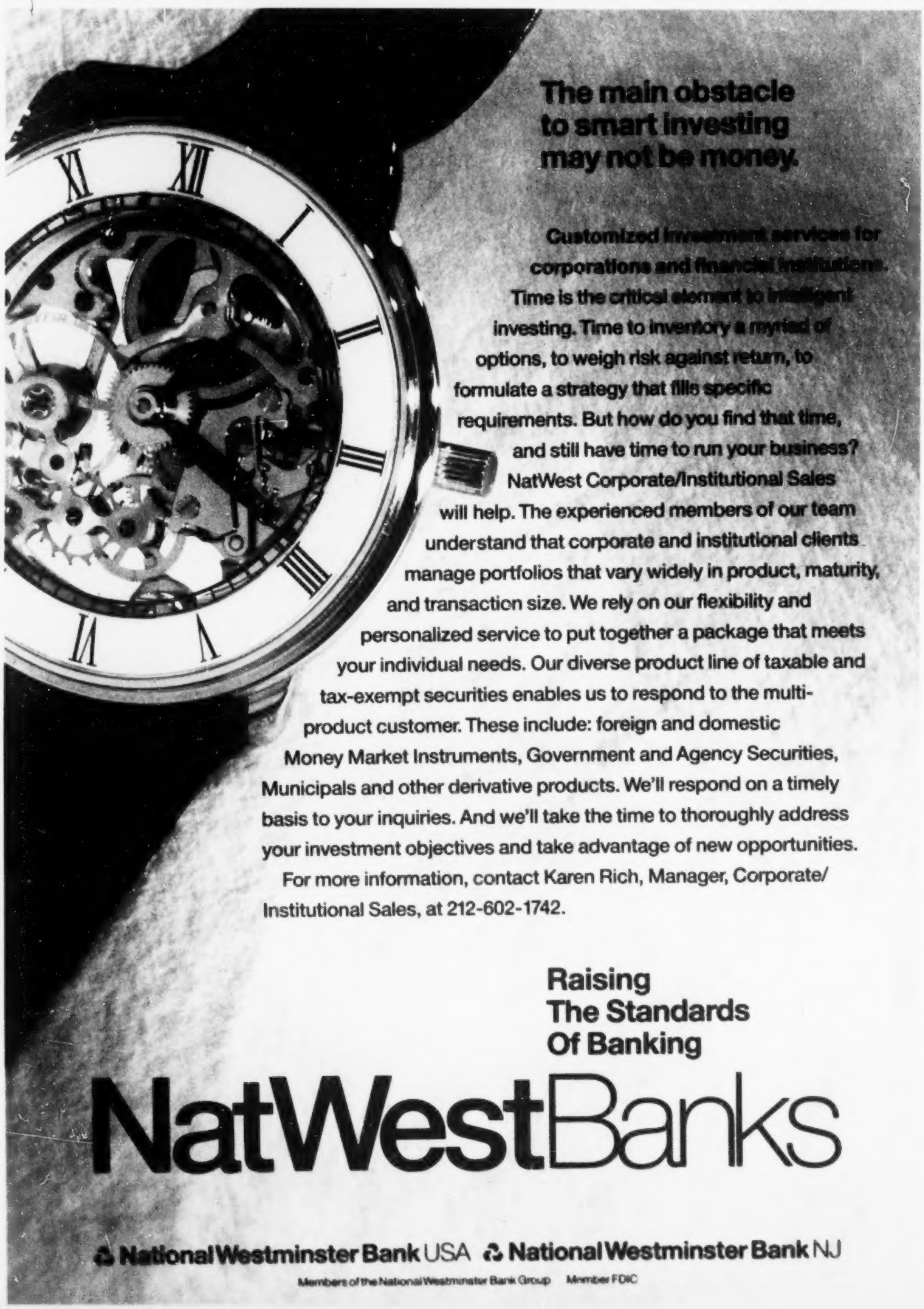
840 Newport Center Drive, Suite 360,
Newport Beach, Calif. 92660; (714)
760-4885

Total assets managed	$24,771,000,000
U.S. tax-exempt assets managed:	
Total	$24,771,000,000
Global	$468,000,000
Bond accounts	$468,000,000
Minimum separate account	$50,000,000

All of Pacific Investment Management Co.'s U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in Newport Beach.

Working within a long-term framework, the firm examines economic, financial, demographic and policy trends to define the relative attractiveness of



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foreign assets. Country and currency allocations are further dependent on the economic growth and inflation potentials of each country. Additional consideration is given to international trade flows, relative real interest rates and coordinated currency policies.

The firm, a subsidiary of Pacific Financial Cos., has been registered with the SEC since 1971.

W.H. Gross is chief investment officer; Brent Harris is client contact.

PanAgora Asset Management

1 Boston Place, 17th Floor, Boston,
Mass. 02108; (800) 423-6041

Total assets managed	$827,000,000
Non-U.S. pension assets	$337,000,000
U.S. tax-exempt assets managed:	
Total	$490,000,000
International	$490,000,000
Equity accounts	$460,000,000
Bond accounts	$30,000,000
Minimum separate account	$10,000,000

PanAgora Asset Management's international equity assets were committed most heavily to Japan, the U.K., Sweden, France and Singapore as of March 31.

Of the U.S. institutional tax-exempt assets invested abroad, $30 million is managed actively, $95 million is managed in active/passive strategies and $365 million, passively.

Analysts or portfolio managers are stationed in Boston and London.

The firm offers quantitatively driven structured investment products. It offers products that focus on investment flexibility, cost efficiency, predictable performance and risk control.

The firm has been registered with the SEC since 1989.

Richard Crowell and Alan Brown are chief investment officers in Boston and London, respectively; Steve Shugars is client contact in Boston.

Alan Patricof Associates

24 Upper Brook St., London W1Y 1PD
U.K.; 071-872-0015

Total assets managed	$271,000,000
U.S. tax-exempt assets managed:	
Total	$93,000,000
Global	$93,000,000
Equity accounts	$93,000,000

Alan Patricof Associates Ltd.'s global equity assets were committed most heavily to France, the U.S. and the U.K. as of March 31.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in London, Paris, Zurich, Madrid, New York, Palo Alto and Philadelphia.

The firm invests venture capital in high-growth companies at all stages of development and across all industry sectors. Its investment approach is hands-on.

The firm is a subsidiary of the MMG Patricof Group PLC.

Ronald Cohen is the client contact in the U.K.

Payden & Rygel Investment Counsel

333 S. Grand Ave., Suite 3250, Los
Angeles, Calif. 90071; (213)
625-1900

Total assets managed	$6,981,000,000
U.S. tax-exempt assets managed:	
Total	$4,625,000,000
International	$55,000,000
Bond accounts	$55,000,000
Global	$400,000,000
Bond accounts	$400,000,000
Minimum separate account	$25,000,000

All of Payden & Rygel Investment Counsel's U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in Los Angeles.

The firm develops high-quality fixed-income portfolios, adding value from interest rate differentials or capital appreciation. Low volatility hedging strategies significantly reduce currency risk. Fundamental and technical analyses are used in country selection.

The firm has been registered with the SEC since 1983.

Joan A. Payden is chief investment officer; Thomas J. Duckworth is client contact.

PCM International

751 Broad St., 2 Plaza, Newark, N.J.
07102-3777; (201) 802-4559

Total assets managed	$4,417,000,000
Non-U.S. pension assets	$80,000,000
U.S. tax-exempt assets managed:	
Total	$1,429,000,000
International	$397,000,000
Equity accounts	$309,000,000
Bond accounts	$88,000,000
Global	$1,032,000
Bond accounts	$1,032,000,000
Minimum separate equity account	$10,000,000
Minimum separate bond account	$20,000,000

Of the U.S. institutional tax-exempt assets invested abroad by PCM International March 31, $1.407 billion is managed actively and $22 million is managed in active/passive strategies.

Analysts or portfolio managers are stationed in Newark.

The firm is a bottom-up stock picker. Security valuations are screened through a proprietary computer model; currencies are actively managed. In fixed income, the firm combines fundamental and technical analyses. Proprietary models are used. Security selection is concentrated on highly liquid, high-quality issues, typically government securities.

The firm, a subsidiary of Prudential Insurance Co. of America, has been registered with the SEC since 1984.

Barry Gillman is chief investment officer; J. Eric Nelson is client contact.

Philippe Investment Management Inc.

122 E. 42nd St., New York, N.Y.
10168; (212) 687-3616

Total assets managed	$573,000,000
Non-U.S. pension assets	$44,000,000
U.S. tax-exempt assets managed:	
Total	$529,000,000
International	$243,000,000
Equity accounts	$243,000,000
Global	$142,000,000
Equity accounts	$142,000,000
Minimum separate account	$25,000,000

Philippe Investment Management Inc.'s international equity assets were committed most heavily to the U.K., Japan, France, West Germany and Switzerland as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.K., Japan, France, the U.S. and West Germany.

All U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in New York, Paris, London and Luxembourg.

The firm incorporates top-down and bottom-up strategies. Equal weight is placed on country, sector and stock decisions. Portfolios contain about 150 securities, with generally one-third being in smaller-cap issues.

The firm has been registered with the SEC since 1982.

Beatrice Philippe is chief investment officer; Claudette Mayer is client contact.

Posthorn Global Asset Management

No. 2 Broadgate, London EC2M 7HA
U.K.; 071-601-0021

Total assets managed	$1,930,000,000
Non-U.S. pension assets	$77,000,000
U.S. tax-exempt assets managed:	
Total	$282,000,000
International	$76,000,000
Bond accounts	$76,000,000
Global	$206,000,000
Bond accounts	$206,000,000
Minimum separate account	$10,000,000

All of Posthorn Global Asset Management's U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in London.

The firm combines an active style with a disciplined and quantitative fixed-income investment process. Interest rate and currency movements are projected through a framework based upon global economic scenarios. Risk/return levels are quantified from those scenarios to form a base from which portfolios are constructed.

The firm, a subsidiary of Shearson Lehman Hutton Inc., has been registered with the SEC since 1984.

Pauline A.M. Barrett is chief investment officer and client contact.

Rowe Price-Fleming International Inc.

100 E. Pratt St., Baltimore, Md. 21202;
(301) 547-2140

Total assets managed	$3,813,000,000
U.S. tax-exempt assets managed:	
Total	$3,051,000,000
International	$3,051,000,000
Equity accounts	$2,844,000,000
Bond accounts	$207,000,000
Minimum separate account	$20,000,000

Rowe Price-Fleming International Inc.'s international equity assets were committed most heavily to West Germany, the U.K., Japan, France and the Netherlands as of March 31.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in Bahrain, Baltimore, Geneva, Hong Kong, Jakarta, Kuala Lumpur, Melbourne, London, New York, Paris, the Philippines, Seoul, Sydney, Taipei, Tokyo, Frankfurt and Zurich.

In equities, the firm uses a top-down, bottom-up approach, with large- and/or small-capitalization stocks. Worldwide research capabilities are of primary importance. The fixed-income approach is fundamentally oriented, using active management of credit markets and currency exposure.

The parent companies are T. Rowe Price Associates, Robert Fleming Holdings and Jardine Fleming Holdings. The firm has been registered with the SEC since 1979.

Martin G. Wade is chief investment officer; George A. Murnaghan is client contact.

The Putnam Cos. Inc.

1 Post Office Square, Boston, Mass.
02109; (617) 292-1000

Total assets managed	$2,295,000,000
Non-U.S. pension assets	$105,000,000
U.S. tax-exempt assets managed:	
Total	$265,000,000
International	$113,000,000
Equity accounts	$113,000,000
Global	$152,000,000
Bond accounts	$152,000,000
Minimum separate account	$10,000,000

Top 50 managers of global account assets*

	U.S. $ mils.
Brinson Partners	4,652
Templeton Int'l	2,461
Dimensional Fund Advisors	1,383
Wells Fargo Nikko	1,233
Batterymarch Financial	1,225
WorldInvest	1,094
Morgan Stanley Asset	1,060
PCM Int'l	1,032
Warburg Investment	1,025
Fiduciary Trust Int'l	879
TCW Global Advisors	865
Capital Guardian Trust	841
BEA Associates	630
State Street Bank	486
Pacific Investment	468
Alliance Capital	443
Payden & Rygel Investment	400
Capital Research & Mgmt.	361
J.P. Morgan Investment	335
County NatWest Investment	327
Discount Corp. of New York	300
Globe Finlay	252
Grantham Mayo v. Otterloo	243
INVESCO MIM	242
Massachusetts Financial	210
Posthorn Global Asset	206
Burgess Capital	203
Fidelity Mgmt. Trust	194
Nikko Capital	168
Putnam	152
Morgan Grenfell Investment	149
Smith Barney Global Capital	143
Philippe Investment	142
Marvin & Palmer Associates	140
Scudder, Stevens & Clark	132
Bankers Trust Investment	127
Schroder Capital	125
BZW Investment**	114
IDS Int'l	109
Beutel, Goodman Int'l	95
Brandes Investment	95
Lexington Mgmt.	94
Alan Patricof Associates	93
Van Eck Associates	80
Lombard Odier Int'l	68
Dunedin Fund Managers	59
Boston Int'l Advisors	46
Marathon Asset	43
Interinvest	40
Walter Scott	35
Total	**25,319**

*U.S., institutional, discretionary, tax-exempt assets
**As of Dec. 31

The Putnam Cos. Inc.'s international equity assets were committed most heavily to the Netherlands, Japan, Switzerland, West Germany and France as of March 31.

All U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in Boston, London and Tokyo.

The firm uses a top-down/bottom-up equity approach. Value-oriented stock selection is used to identify mispriced stocks. In fixed income, it uses a systematic process to achieve positive returns in any currency.

The firm, a subsidiary of Marsh & McLennan Cos. Inc., has been registered with the SEC since 1968.

Lawrence J. Lasser is chief investment officer; Suzanne S. Filbey is client contact.

R

RCB Trust Co.

29 Federal St., Stamford, Conn.
06901; (203) 977-7000

Total assets	$2,693,000,000
Assets assigned to other firms:	
Total	$2,693,000,000
Non-U.S. pension	$1,543,000,000
U.S. tax-exempt total	$1,150,000,000
International	$227,000,000
Equity accounts	$227,000,000
Global	$330,000,000
Equity accounts	$316,000,000
Bond accounts	$14,000,000
Minimum separate account	$50,000,000

RCB Trust Co., a manager of managers, assigns all assets to external managers. Its international equity assets were committed most heavily to Japan, West Germany, the U.K., Singapore/Malaysia and France as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Japan, West Germany, the U.K. and France. All assets are actively managed by the submanagers.

In its multiadviser approach, the firm selects specialized investment advisers with complementary styles and disciplines. Results are monitored closely, with changes made when appropriate.

The firm, a subsidiary of RCB International Inc., has been registered with the SEC since 1980.

William L. Green is chief investment officer; Robert J. Russell is client contact.

Master trust: Oct. 1

NM Rothschild International Asset Management Ltd.

Five Arrows House, St. Swithin's Lane,
London EC4N 8NR U.K.;
071-280-5000

Total assets managed	$1,888,000,000
Non-U.S. pension assets	$841,000,000
U.S. tax-exempt assets managed:	
Total	$455,000,000
International	$429,000,000
Equity accounts	$30,000,000
Bond accounts	$399,000,000
Global	$26,000,000
Bond accounts	$26,000,000
Minimum separate account	$10,000,000

NM Rothschild International Asset Management Ltd. actively manages all of its U.S. institutional tax-exempt assets invested abroad.

Analysts or portfolio managers are stationed in London, Tokyo, Singapore and Hong Kong, with affiliates in Paris, Zurich, Guernsey, Sydney and New York.

The firm uses macroeconomic fundamental analysis, dampening volatility of returns through incremental implementation. Value is sought during the selection of individual securities. Currency is treated separately and is actively managed.

The firm, a subsidiary of NM Rothschild Asset Management Ltd., has been registered with the SEC since 1980.

Nigel Wightman is chief investment officer; Suzanne Schecter is client contact in New York at (800) 753-5151.

Frank Russell Trust Co.

909 A St., Tacoma, Wash.
98401-1454; (206) 572-2282

Total assets	$9,700,000,000
Assets assigned to other firms:	
Total	$9,700,000,000
U.S. tax-exempt total	$9,700,000,000
International	$649,000,000
Equity accounts	$649,000,000
Minimum separate account	$5,000,000

Frank Russell Trust Co., a manager of managers, assigns all assets to external managers.

International equity assets were committed most heavily to Japan, the U.K., West Germany, France and Switzerland as of March 31. All assets are actively managed by respective submanagers.

The firm's International I fund employs a risk-control strategy that emphasizes diversification among capitalization sizes, valuation ranges and country bets to achieve broad participation in the countries and markets of Europe and the Far East. One submanager selects core investments using quantitative methods. The fund then employs additional advisers which fall into three investment strategy categories: price-driven, market-oriented and earnings growth.

The firm is a subsidiary of Frank Russell Co.

Randall P. Lert is chief investment officer; Virginia P. Sirusas is client contact.

S

SBC Portfolio Management International Inc.

1 World Trade Center, Suite 8935,
New York, N.Y. 10048; (212)
432-8900

Total assets managed	$615,000,000
Non-U.S. pension assets	$30,000,000
U.S. tax-exempt assets managed:	
Total	$480,000,000
International	$452,000,000
Equity accounts	$452,000,000
Global	$15,000,000
Equity accounts	$15,000,000
Minimum separate account	$10,000,000

SBC Portfolio Management International Inc.'s international equity assets were committed most heavily to West Germany, Japan, France, the U.K. and the Netherlands as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Japan, West Germany, France and the U.K.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers, through parent Swiss Bank Corp., are located in the U.S., U.K., Hong Kong, Singapore, Japan and Switzerland.

The firm is a top-down/bottom-up equity-oriented manager, relying on superior information to make strong bets against the EAFE when prudent, while investing across the whole spectrum of the index. Active currency management, hedging when necessary, protects value-oriented stock selection, which is fundamental, with quant overlays.

The firm has been registered with the SEC since 1982.

Peter J. Morant is chief investment officer; John W. Conlin is client contact.

Schroder Capital Management International

787 Seventh Ave., New York, N.Y.
10019; (212) 841-3630

Total assets managed	$3,387,000,000
Non-U.S. pension assets	$394,000,000
U.S. tax-exempt assets managed:	
Total	$2,905,000,000
International	$2,780,000,000
Equity accounts	$2,775,000,000
Bond accounts	$5,000,000
Global	$125,000,000
Equity accounts	$125,000,000
Minimum separate account	$20,000,000

Schroder Capital Management International's international equity assets were committed most heavily to Japan, West Germany, the U.K., Switzerland and France as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Japan, West Germany, Switzerland and France.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in the U.K., Zurich, Tokyo, Singapore, Hong Kong, Sydney and New York.

The firm's equity approach begins with country allocation based on two-year economic projections. Within each country, the focus is on growth stocks. Fixed income is used as a limited tactical alternative.

The firm, a subsidiary of Schroders PLC, has been registered with the SEC since 1979.

Richard R. Foulkes is chief investment officer; Sharon L. Haugh is client contact.

Walter Scott International

626 Wilshire Blvd., Suite 410, Los
Angeles, Calif. 90017; (213)
623-2800

Total assets managed	$600,000,000
Non-U.S. pension assets	$350,000,000
U.S. tax-exempt assets managed:	
Total	$250,000,000
International	$215,000,000
Equity accounts	$215,000,000
Global	$35,000,000
Equity accounts	$35,000,000
Minimum separate account	$5,000,000

Walter Scott International's international equity assets were committed most heavily to Japan, Hong Kong, the Netherlands, the U.K. and France as of March 31.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in Edinburgh.

The firm's equity approach identifies the top quartile of world economic growth sectors and buys the best companies that are expected to continue growing internally at a rate of 20%. The geographic allocation is a result of this process.

The firm, a subsidiary of Walter Scott & Partners, has been registered with the SEC since 1983.

Walter G. Scott is chief investment officer; Richard A. Miller is client contact.

Scudder, Stevens & Clark

345 Park Ave., New York, N.Y. 10154;
(212) 326-6297

Total assets managed	$46,421,000,000*
U.S. tax-exempt assets managed:	
Total	$10,557,000,000
International	$782,000,000
Equity accounts	$721,000,000
Bond accounts	$61,000,000
Global	$132,000,000
Equity accounts	$124,000,000
Balanced	$8,000,000
Minimum separate account	$10,000,000

**data are as of Dec. 31*

Scudder, Stevens & Clark's international equity assets were committed most heavily to Japan, West Germany, the U.K., the Netherlands and Switzerland.

Its global equity assets were committed most heavily to the U.S., West Germany, the U.K., Switzerland and the Netherlands.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in New York, Boston, Toyko and London.

The firm's approach incorporates macroeconomic and microeconomic analyses. Assessments of the global economy as well as local market and currency factors are meshed with in-depth security analysis. Quantitative and qualitative research is used.

The firm has been registered with the SEC since 1943.

Nicholas Bratt is chief investment officer. The client contacts are Emily L. Smith in New York; Victoria J. Hergel in Chicago; and David E. Honeyman in San Francisco.

Smith Barney Global Capital Management Inc.

1345 Avenue of the Americas, New
York, N.Y. 10105; (212) 698-6131

Total assets managed	$263,000,000
Non-U.S. pension assets	$41,000,000
U.S. tax-exempt assets managed:	
Total	$221,000,000
International	$78,000,000
Bond accounts	$78,000,000
Global	$143,000,000
Bond accounts	$143,000,000
Minimum separate account	$10,000,000

Smith Barney Global Capital Management Inc.

Pensions & Investments
welcomes news of personnel
changes. Send items to:
Peter J. Retzbach
Pensions & Investments
740 Rush St.
Chicago, Ill. 60611
(312) 649-5390

actively manages all of its U.S. institutional tax-exempt assets invested abroad.

Analysts or portfolio managers are stationed in New York, London, Paris and Tokyo.

The firm's active fixed-income approach uses a research-based modeling system, fundamental overlays and active currency decisions.

The firm, a subsidiary of Primerica Corp., has been registered with the SEC since 1986.

Stephen J. Glover is chief investment officer; Jill B. Jordon is client contact.

State Street Bank & Trust
225 Franklin St., Boston, Mass. 02110;
(617) 654-3953

Total assets managed	$47,765,000,000
Non-U.S. pension assets	$3,527,000,000
U.S. tax-exempt assets managed:	
Total	$42,849,000,000
International	$7,388,000,000
Equity accounts	$7,269,000,000
Bond accounts	$119,000,000
Global	$486,000,000
Equity accounts	$486,000,000
Minimum separate account	$5,000,000

State Street Bank & Trust Co.'s international equity assets were committed most heavily to Japan, the U.K., West Germany, France and Switzerland as of March 31.

As of the same date, its global equity assets were committed most heavily to Japan, the U.S., West Germany, the U.K. and France.

Of the U.S. institutional tax-exempt assets invested abroad, $140 million is managed actively, $1.16 billion is managed in active/passive strategies and $6.574 billion, passively.

Analysts or portfolio managers are stationed in Boston.

The firm's investment approach is quantitative and value-oriented. Active strategies include stock selection, country selection or a combination. Currency hedging also is used.

The firm is a subsidiary of State Street Boston Corp.

Nicholas A. Lopardo is chief investment officer; Peter E. Braun is client contact.

Strategic Investment Partners Inc.
2000 K St. N.W., Suite 400,
Washington, D.C. 20006; (202)
785-2300

Total assets	$4,855,000,000
Assets assigned to other firms:	
Total	$4,855,000,000
Non-U.S. pension	$112,000,000
U.S. tax-exempt total	$3,958,000,000
Global	$3,958,000,000
Balanced	$3,958,000,000
Minimum separate account	$20,000,000

Strategic Investment Partners Inc., a manager of managers, assigns all assets to other firms for management.

Its global equity assets were committed most heavily to the U.S., the U.K., West Germany, France and the Netherlands as of March 31.

Analysts or portfolio managers are based in Washington.

The firm uses quantitative tools, such as a global equity valuation model, and judgment to tilt its international portfolios toward pockets of significant value worldwide. The investment strategy is executed through specialist submanagers, with tactical asset allocation and currency management implemented directly by the firm. Equity portfolios combine active and passive management strategies to achieve efficient, cost-effective diversification.

The firm has been registered with the SEC since 1987.

Hilda Ochoa is chief investment officer; Ms. Ochoa and Mary Choksi are client contacts.

T

TCW Global Advisors
400 S. Hope St., Suite 500, Los
Angeles, Calif. 90071; (213)
683-4000

Total assets managed	$1,071,000,000
U.S. tax-exempt assets managed:	
Total	$865,000,000
Global	$865,000,000
Minimum separate account	$50,000,000

TCW Global Advisors' global assets were committed most heavily to the U.S., the U.K. and West Germany.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in London, Paris and New York.

The firm's uses a top-down, asset allocation approach based on computer-aided macroeconomic research that evaluates a range of monetary, economic and financial factors. Six countries are followed.

The firm, a subsidiary of Trust Co. of the West and Cursitor-Eaton Asset Management, has been registered with the SEC since 1986.

Charles Gave is chief investment officer; Thomas E. Larkin Jr. is client contact.

Foreign exchange will be highlighted Oct. 15.

Templeton International
500 E. Broward Blvd., Suite 2100, Fort
Lauderdale, Fla. 33394; (305)
764-7390

Total assets managed	$2,930,000,000
Non-U.S. pension assets	$152,000,000
U.S. tax-exempt assets managed:	
Total	$2,545,000,000
International	$84,000,000
Equity accounts	$72,000,000
Bond accounts	$12,000,000
Global	$2,461,000,000
Equity accounts	$2,375,000,000
Bond accounts	$86,000,000
Minimum equity account	$10,000,000
Minimum fixed-income account	$25,000,000

Templeton International's international equity assets were committed most heavily to the U.K., Australia, France, Spain and Hong Kong as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Australia, the U.K., Hong Kong and Canada.

All of the U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in Nassau, Toronto, Hong Kong, Edinburgh and Fort Lauderdale.

The firm's equity approach is bottom up, with portfolios built from a stock selection orientation. The key equity factor is price relative to long-term earnings potential or real book value; a five-year horizon is used.

The firm, a subsidiary of Templeton, Galbraith & Hansberger Ltd., has been registered with the SEC since 1979.

Thomas L. Hansberger is chief investment officer; James R. Wood is client contact.

The Travelers
1 Tower Square, Hartford, Conn.
06183; (203) 277-2997

Total assets managed	$44,321,000,000
U.S. tax-exempt assets managed:	
Total	$24,690,000,000
International	$838,000,000
Equity accounts	$484,000,000
Bond accounts	$318,000,000
Currencies	$36,000,000

The Travelers' international equity assets were committed most heavily to Japan, West Germany, the U.K., France and Switzerland as of March 31.

Of the U.S. institutional tax-exempt assets invested abroad, $550 million is managed actively and $288 million, passively.

Analysts or portfolio managers are stationed in Hartford and London.

The firm seeks to outperform the EAFE and FT-A EuroPac indexes using asset allocation and stock selection in a team management approach.

The firm, a subsidiary of The Traveler Corp., has been registered with the SEC since 1976.

Richard Shima is chief investment officer; John C. Parish is client contact.

V

Van Eck Associates Corp.
122 E. 42nd St., New York, N.Y.
10168; (212) 687-5200

Total assets managed	$1,413,000,000
U.S. tax-exempt assets managed:	
Total	$214,000,000
Global	$80,000,000
Equity accounts	$80,000,000
Minimum separate account	$10,000,000

Van Eck Associates Corp.'s global assets were committed to gold-oriented equities as of March 31.

All U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in New York.

The firm identifies major macroeconomic and political trends and translates them into investment themes. Hedging is used to protect value. The firm emphasizes quality, liquidity, long-term results and preservation of capital.

The firm, a subsidiary of Van Eck Management Corp., has been registered with the SEC since 1983.

John C. van Eck is chief investment officer; Robin Erni is client contact.

The Vanguard Group Inc.
Vanguard Financial Center, Valley
Forge, Pa. 19487; (215) 648-6000

Total assets	$51,272,000,000
Assets assigned to other firms:	
Total	$51,272,000,000
U.S. tax-exempt total	$13,422,000,000
International	$1,385,000,000
Equity accounts	$1,385,000,000

The Vanguard Group Inc., a manager of managers, assigns all assets to external managers. All assets are managed actively on its behalf.

The firm offers two international funds, the Trustees' Commingled Fund and Vanguard World Fund. The TCF fund normally holds more than 100 stocks, selected from the highest-rated names within a large pool. Individual stock selections rely on computer models, with current strategic themes including small-cap stocks and relative value. In the World Fund, a core/non-core approach is used. Core securities are predominantly small to midsize

BCI
CAPITAL FOR GROWTH

$135,500,000

BCI GROWTH, L.P.

Private placement investors in convertible debt, debt with warrants or stock, or other equity-related securities, in companies, public or private, with sales of $5 million to $100 million. Funded by pension funds, insurance companies and other institutional investors.

General Partners
Donald P. Remey   Hoyt J. Goodrich
J. Barton Goodwin   Theodore T. Horton, Jr.

BCI Advisors, Inc.
Glenpointe Centre West, Teaneck, New Jersey 07666
(201) 836-3900

April 30, 1990

GROUP RCMI INTERNATONAL

Realty Capital Markets, Inc.
Has Acted As Investment Advisor
to
Two International Investors
Concerning The Acquisition of a 40% Partnership Intererst
and
A Forward Commitment To Acquire An Additional 55% Partnership Interest
in
Two Rodeo Associates,
Owner and Developer of
Two Rodeo Drive
A European Style Urban Shopping Complex of Twenty-Three Buildings
Beverly Hills, California

GROUP RCMI INTERNATONAL
San Francisco   Tokyo

companies in any of 15 major markets.

The firm has been registered with the SEC since 1976.

John C. Bogle is chief investment officer; James F. Gately is client contact.

W

Warburg Investment Management International

780 Third Ave., New York, N.Y. 10017;
(212) 751-8394

Total assets managed	$2,225,000,000
Non-U.S. pension assets	$356,000,000
U.S. tax-exempt assets managed:	
Total	$1,831,000,000
International	$806,000,000
Equity accounts	$561,000,000
Bond accounts	$245,000,000
Global	$1,025,000,000
Equity accounts	$405,000,000
Bond accounts	$620,000,000
Minimum separate account	$10,000,000

Warburg Investment Management International Ltd.'s international equity assets were committed most heavily to Japan, the U.K., West Germany, France and Switzerland as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Japan, West Germany, the U.K. and France.

All U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in London, Tokyo, Melbourne and New York.

The firm's investment style incorporates both top-down and bottom-up methodologies. Twenty countries are followed; portfolios are invested in up to 12 countries and weightings can vary greatly from the EAFE.

The firm, a subsidiary of Mercury Asset Management Group PLC, has been registered with the SEC since 1976.

Robert P.B. Michaelson is chief investment officer; Steven W. Golann is client contact.

Wellington Management Co.

75 State St., Boston, Mass. 02109;
(617) 951-5000

Total assets managed	$41,804,000,000
U.S. tax-exempt assets managed:	
Total	$14,144,000,000
International	$438,000,000
Equity accounts	$384,000,000
Bond accounts	$54,000,000
Global	$20,000,000
Equity accounts	$20,000,000
Minimum separate account	$10,000,000

Wellington Management Co.'s international equity assets were committed most heavily to Japan, West Germany, France, the U.K. and Switzerland as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S. and Japan.

All U.S. institutional tax-exempt assets invested abroad are managed actively.

Analysts or portfolio managers are stationed in Atlanta, Boston, Valley Forge and London.

The firm's equity approach incorporates bottom-up security selection and top-down country allocation, with currencies normally unhedged. In fixed-income, country weightings are determined by top-down analysis. Maturity is determined by interest rate anticipation and currency exposure is hedged.

The firm has been registered with the SEC since 1960.

Robert W. Doran is chief investment officer; Dena G. Willmore is client contact.

Wells Fargo Nikko Investment Advisors

45 Fremont St., San Francisco, Calif.
94105; (415) 597-2700

Total assets managed	$72,391,000,000
Non-U.S. pension assets	$3,621,000,000
U.S. tax-exempt assets managed:	
Total	$66,458,000,000
International	$2,362,000,000
Equity accounts	$2,157,000,000
Bond accounts	$81,000,000
Balanced	$124,000,000
Global	$1,233,000,000
Equity accounts	$1,233,000,000
Minimum separate account	$100,000,000

Wells Fargo Nikko Investment Advisors' international equity assets were committed most heavily to Japan, the U.K., West Germany, France and Italy as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., Japan, the U.K., France and West Germany.

Of the U.S. institutional tax-exempt assets invested abroad, $124 million is managed in active/passive strategies and $3.471 billion, passively.

Analysts or portfolio managers are stationed in San Francisco and Tokyo.

The firm offers index funds tracking the EAFE, FT-A EuroPac and Salomon World Government Bond indexes, asset allocation funds and tilted index funds, South Africa-free funds and currency hedging.

The firm, a subsidiary of Wells Fargo & Co. and Nikko Securities Co. Ltd., has been registered with the SEC since 1985.

Patricia C. Dunn and Jeffrey L. Skelton are chief investment officers; Michael J. Henman is client contact.

WorldInvest Ltd.

56 Russell Square, London WC1B
4HP U.K.; 071-637-3322

Total assets managed	$53,316,000,000
Non-U.S. pension assets	$997,000,000
U.S. tax-exempt assets managed:	
Total	$2,319,000,000
International	$1,225,000,000
Equity accounts	$293,000,000
Bond accounts	$919,000,000
Balanced	$13,000,000
Global	$1,094,000,000
Equity accounts	$172,000,000
Bond accounts	$837,000,000
Balanced	$85,000,000
Minimum separate account	$15,000,000

WorldInvest Ltd.'s international equity assets were committed most heavily to France, the U.K., Canada, Switzerland and Spain as of March 31.

As of the same date, its global equity assets were committed most heavily to the U.S., France, the U.K., Canada and Spain.

All U.S. institutional tax-exempt assets invested internationally are managed actively.

Analysts or portfolio managers are stationed in London.

The firm's investment approach is driven by fundamental economic analysis. The firm is willing to take significant positions away from the index based on its top-down view of expected returns.

The firm has been registered with the SEC since 1980.

Keith Brown is chief investment officer; Susan Leader is client contact at (212) 755-0900.

Fed eases stock trade restrictions

Foreign securities trading got a boost in the first quarter from the Federal Reserve Board.

The Fed approved amendments to Regulation T to accommodate the settlement and clearance of foreign securities transactions and to permit marginability of foreign securities at broker-dealers.

That will make it easier for U.S. investors to use their U.S. brokerage margin accounts to buy foreign stocks and bonds not listed on major U.S. stock exchanges. Before now, investors had to pay in full for their purchases. The Fed proposed the rule change last year; it becomes effective April 30.

Now foreign stocks and bonds — including debt denominated in foreign currencies — will be eligible for margin at broker-dealers on the same basis as other securities.

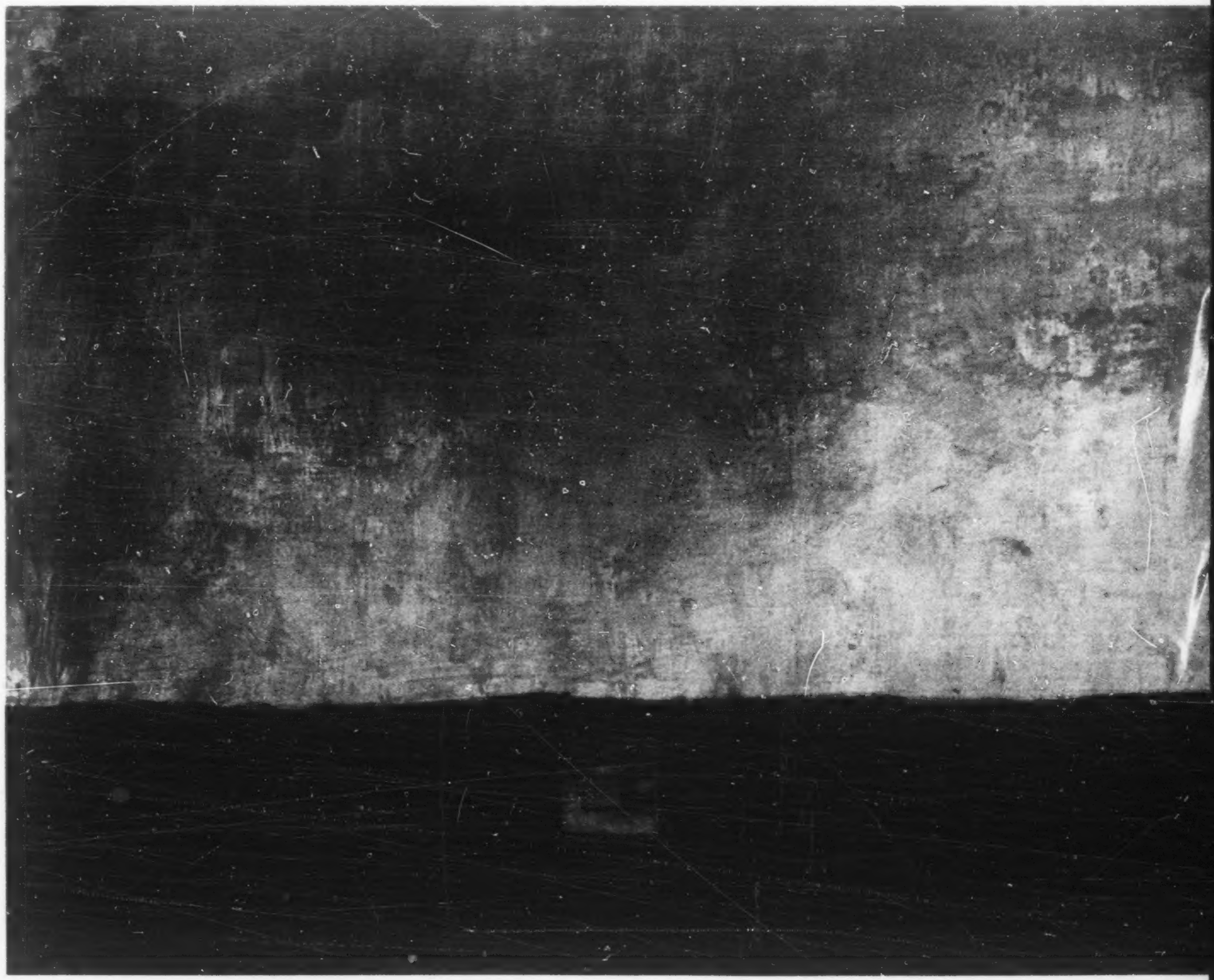
Restrictions on payment and settlement for foreign securities will be eased. Broker-dealers will be allowed to arrange with foreign investors to extend credit for their foreign securities purchases.

Foreign equity securities will be eligible for margin treatment if they have been trading for at least six months on an exchange or recognized foreign market, have an aggregate market value for the security of at least $1 billion, an average weekly trading volume of at least 200,000 shares or the equivalent of $1 million and the issuer has been in business for five years.

The board will publish a quarterly list of foreign equity securities that are marginable.

Foreign corporate debt securities will be marginable if the original issue had outstanding a principal amount of at least $100 million, the issue is not in default on interest or principal payments and the issue is rated in one of the two highest rating categories by a leading rating agency. ■

THE CREATION OF VALUE



The Creation of Value *by Brad Holland, New York City. "To create," said the artist, "is to mediate between a void and an abstraction." The creation of value depends on action, and action depends on ideas.*

MBS market

Continued from page 1

assets at the end of 1989, up from 8.9% a year earlier. HUD has not yet issued first-quarter figures.

The Federal Reserve Board reported large commercial banks also showed impressive gains in mortgage-backed holdings, up 62% to $80 billion in the first quarter 1990 from the same period a year ago. Overall, commercial bank holdings were up 12% in calendar-year 1989. Mortgage-backed securities comprised 5.3% of commercial bank portfolio assets at the end of the first quarter, compared with 3.5% a year earlier.

Pension funds, on the other hand, held $82 billion in mortgage-backed securities at the end of 1989. Private pension funds increased their holdings less than 1% in 1989, and public pension funds had a 10% decline during the year.

Through the 12-month period ended March 31, mortgage-backed securities were the top total fixed-income performer, returning 13.1%. Ten-year Treasury securities returned 11.7%, corporate bonds returned 11.9% and federal agency securities, 11.7%. Mortgage-backed securities returned 135 basis points over Treasuries at the end the first quarter, compared with AAA financial bonds, which were 58 basis points over Treasuries during the same period.

The man known as the father of mortgage-backed securities wonders why pension funds are so slow to invest.

"The pension funds are the only ones big enough to replace the thrifts in a shrinking savings and loan market and those banks that don't invest in mortgage-backed securities," said Lewis S. Ranieri, who helped create the mortgage-backed securities market and is chairman of Hyperion Capital Management, New York. "And pension funds are underfunded in mortgages right now."

Some pension funds new to mortgage-backed securities investments might find them complicated and intimidating. Others don't want to deal with the uncertainty mortgage pre-payments can cause and the extensive bookkeeping. And funds that manage their own money might not have the expertise to do the research and analysis on the complex instruments.

"These are fairly sophisticated transactions, and some pension funds may not have the staffing or the history of working with mortgage-backed securities so that they don't feel confident in what they are buying," said Robert McLaughlin, investment officer for the $20 billion Ohio Public Employees' Retirement System, Columbus, which has $5 billion in mortgage-backed securities.

Money managers and others believe pension funds soon will step up to the plate because some might be underweighted in mortgages and because some state and local funds are getting pressure to make economically targeted investments. Pumping money into local housing is one of the key thrusts of this emerging investment trend.

Mal Kangas is investment officer for the $30 billion California State Teachers' Retirement System, Sacramento, which has $3.1 billion in mortgage-backed securities. He said: "We have $2 billion which has been newly invested in California mortgages over the past four years."

Some pension funds may have reduced their allocation due to thrift industry volatility, while others were comfortable with their current levels and didn't increase their allocations.

"We are in a neutral position right now, neither reducing nor adding to our commitment in mortgage-backed securities," said DeWitt Bowman, chief investment officer of the California Public Employees' Retirement System, Sacramento. Mr. Bowman said 12.5% of the $56 billion fund is committed to mortgage-backed securities. "We are at the level we want to be and don't have the ability to absorb new product," he said.

The government agencies that issue mortgage-backed securities, money managers and analysts said some institutional investors are boosting their holdings for several reasons: to get the higher yields; to find an alternative to corporate bonds and avoid event risk; to find a higher credit quality because there is no event or credit risk; and because the almost $1 trillion domestic mortgage securities market has become too large for investors to ignore.

Savings and loans are among the largest holders of mortgage-backed securities, but the failure of many thrifts and the fact the solvent ones are decreasing their holdings has opened the door for new investors.

The appetite for these securities may well match their availability.

Overall mortgage-backed security issuance has been rising steadily — more than 3,000 issues totaling $114.7 billion were issued in 1989 compared with 540 issues totaling $19.7 billion in 1985.

In the first quarter, 1,108 issues totaling $34.8 billion were issued, according to IDD Services Inc., New York.

These securities comprised 44% of the total domestic equity and debt securities market in 1989, up from 35% in 1988.

Asset-backed and mortgage-related financings now claim 63% of the total debt market, up 15% from two years ago.

"We issued a record $70 billion in mortgaged-backed securities last year," said Dale P. Riordan, executive vice president of marketing for the Federal National Mortgage Association in a speech at a conference for institutional investors in New York in mid-May.

"We expect growth to continue in the 1990s, and the $24 billion we issued in the first quarter was also a record," he said.

Fannie Mae is one of scores of issuers of mortgage-backed securities, including investment banks, that package mortgages and sell them. The largest underwriters of mortgage-backed securities for the first quarter 1990 were Bear Stearns & Co.; Prudential-Bache Capital Funding; Goldman, Sachs & Co.; Kidder Peabody & Co.; and Merrill Lynch Capital Markets.

"When spreads widen, a lot of institutional investors come into the mortgage-backed securities market," said Warren Spector, Bear Stearns senior managing director in charge of mortgage-backed securities sales. Bear Stearns issued $5.4 billion in mortgage-backed securities in the first quarter. He added: "Banks are increasing their holdings because government risk-based capital guidelines have encouraged them to hold assets with low, or no credit risk. These securities are backed by the government and have been very good market performers."

Some of the largest insurance company and commercial bank buyers are Prudential Insurance Co. of America, Equitable Life Assurance Society of the United States, Aetna Life & Casualty Co., Chemical Bank, Chase Manhattan Bank and Morgan Guaranty Trust Co.

"Overall, the attraction of investing in mortgage-backed securities is non-event risk and the price of the security," said Dwight Churchill, managing director of fixed income for Prudential Asset Management Co. Inc., New York, which has a total exposure of $9.9 billion in mortgage-backed securities.

"Commercial banks have incentives through federal guidelines to invest in these securities," said Brian P. Lancaster, vice president of Chemical Securities Inc., New York, a Chemical Bank affiliate that has $2 billion in mortgage-backed securities.

"Banks are transferring out of other asset-backed security investments and into mortgages because the returns are higher and they will continue to increase their investments," he said.

A high-profile campaign by Fannie Mae has paid off in a big increase in investor interest. Private pension funds increased their holdings of Fannie Mae mortgage-backed securities 186%, to $6.3 billion at the end of 1989 from $2.2 billion at the end of 1988, according to Robert Sahadi, Fannie Mae's vice president for mortgage-backed securities.

For public pension funds, the holdings increased 29% during the same period, to $7.1 billion from $5.5 billion. ■

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Search

Continued from page 2

had been approved by the board. The search was designed to find small and emerging money managers; a study by Wilshire Associates, Santa Monica, determined most minority- and female-owned firms fell into this category.

The staff, with the help of consulting firms Washington, Hackett, Smith & Co., New Orleans, and Debatin Associates, Atlanta, graded the proposals according to typical investment standards, Mr. Bowman said. When fast-growing firms were reviewed, he said, there at times were questions as to whether the firms had the ability to handle such growth.

Mr. Bowman said while the process might have produced a discriminatory result, there was no intentional discrimination.

Interviewing all 85 firms will give the public employees' system a chance to apply some more subjective analysis, Mr. Bowman said. The board already has interviewed the original 29 finalists and has set aside three days each in July and August to interview the remainder. The system hasn't determined how many firms will be hired or how much money will be placed.

Ed Brown, president of Brown Capital, was pleased to hear the system will consider all 85 firms; he was not given a reason for the initial elimination of his firm. "I was very surprised that there weren't any black-owned management firms selected," he added.

Maceo K. Sloan, president of NCM, also said he was glad the system was concerned enough to interview all 85 firms. Officials at WR Lazard declined comment.

Without pinpointing the public employees' system, however, minority managers generally believe it's hard to break into the institutional market. "It has to do with the ground rules that (institutions) set," Mr. Brown said. For instance, he said, minimum track record requirements exclude many new firms, not just minority-owned, if the firms' principals aren't allowed to submit track records achieved at their previous employers.

While track record requirements are a problem for many firms, minorities and women in the investment business often have the additional problem of not having had prior relationships with institutions, said Barbara Bowles, president of The Kenwood Group Inc., Chicago. Her firm, with $5 million in assets under management, didn't meet the minimum under management for the public employees' search.

Also, penalizing firms for growing too fast is "a rather arbitrary way to look at things," said Marx Cazenave, president of Progress Investment Management Co., San Francisco. The firm offers pooled funds run by emerging managers, especially those owned by women and minorities. It wasn't involved in the California searches.

Still, some minority managers said they've found no special barriers. "People seem interested in giving small firms and minority firms a chance," said John W. Rogers Jr., president of Ariel Capital Management Inc., Chicago. The firm, with $1.2 billion under management, didn't submit a proposal to either California fund because it is not taking on new clients, except in its mutual fund.

The other minority-owned finalist in the teachers' search is Taplin, Canida & Habacht Inc., Miami, whose principal owner is a Hispanic woman; this firm also was a finalist in the public employees' search. Remaining finalists in the teachers' search are Barrow, Hanley, Mewhinney & Strauss Inc., Dallas; Harris Bretall Sullivan & Smith Inc., San Francisco; IDS Advisory Group, Minneapolis; INVESCO Capital Management, Atlanta; Oppenheimer Capital, New York; Sasco Capital Inc., Fairfield, Conn.; J & W Seligman & Co. Inc., New York; and Waddell & Reed Asset Management Co., Kansas City, Mo.

The board of the teachers' system was scheduled to vote on manager hirings late last week, said Thomas Flanigan, chief investment officer of the $32 billion system. He expected the board to hire six to eight of the 12 finalists to divide up $600 million. The system is seeking equity managers in rotational, value and growth styles.

Mr. Flanigan said his system's search was not specifically an emerging or minority manager search. By lowering the minimum in assets under management to $100 million from $500 million and the minimum track record to three years from five, the system was just leveling the playing field, he said. He declined to comment on the public employees' search. ■

Market data group formed

Six top investment banks temporarily shelved their competitive zeal to set up EJV Partners, a joint venture to provide electronic market information to the financial services industry.

The "Group of Six" joint venture partners are the First Boston Corp., Goldman, Sachs & Co., Morgan Stanley & Co. Inc., Salomon Brothers Inc., Shearson Lehman Hutton Inc. and, subject to regulatory approval, Citibank.

Others are expected to participate in the future. The initial focus will be on the fixed-income market, specifically U.S. government securities, and information should be available in about a year.

Distributors and fees haven't been finalized.

Bruce Peterson, the new chief executive officer of EJV Partners, said the firms' collective high-quality information on securities prices, research and analysis will be of use to the players in the financial services industry, including bankers and institutional investors.

Mr. Peterson says he's not worried about the handful of competitors. "There's a lot of room in the market for vendors," he said.

Mr. Peterson formerly was executive vice president and general manager of the information services division of SEI Corp. Booz Allen & Hamilton Inc. helped form the joint venture. ■

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AT DEADLINE

Cost cuts could hit fund

McDonnell Douglas' budget-cutting plans could affect its $7.6 billion pension fund.

Under one proposal, the company might replace top-paid department heads with seconds in command. In that case, David Hammerstein, director-retirement funds management, would be replaced by Sheryl L. Kwiatek, manager-retirement funds management.

Another measure could place all of the fund's assets with a passive manager to reduce fees. The fund is heavily indexed now.

404(c) issue reopened

The Labor Department has decided to reissue for public comment its widely criticized proposed regulation on defined contribution plan investment options. The regulation governs section 404(c) of ERISA.

Minneapolis picks CIO

James Hacking, executive director of the Minnesota Public Employees' Retirement Association, has been named executive director and chief investment officer of the Minneapolis Employees' Retirement Fund. He replaces John Chenoweth, who resigned last month.

PCM drops businesses

PCM International is shedding its international equity and fixed-income mutual funds and international fixed-income institutional business to concentrate on international equity management for tax-exempt clients.

The other accounts will shift to other subsidiaries of PCM's parent, Prudential Insurance.

Harris shifts personnel

Jon S. Brightman has been named head of the trust department at Harris Trust and Savings Bank, replacing Richard C. Caldwell, who became executive vice president in charge of trust and money management for both PNC Financial Corp. and its Provident National Bank unit.

Managers selected

The $310 million Norfolk (Va.) Employees' Retirement System hired Newbold's Asset Management Inc. and The Chicago Corp. to run large-cap equity portfolios of $24 million and $47 million, respectively, and the Putnam Cos. Inc. to run an emerging growth equity portfolio of $16 million . . . The $16 billion Pennsylvania Public School Employees' Retirement System hired London & Bishopsgate International Inc. to manage $10 million each in global cash management and fixed income.

Readers' Digest names CFO

Anthony W. Ruggiero, senior vice president and controller of Bristol-Myers Squibb, has been named chief financial officer of The Readers' Digest Association. He succeeds Vernon Thomas, who stepped down for health reasons.

ESOP refinancings save billions

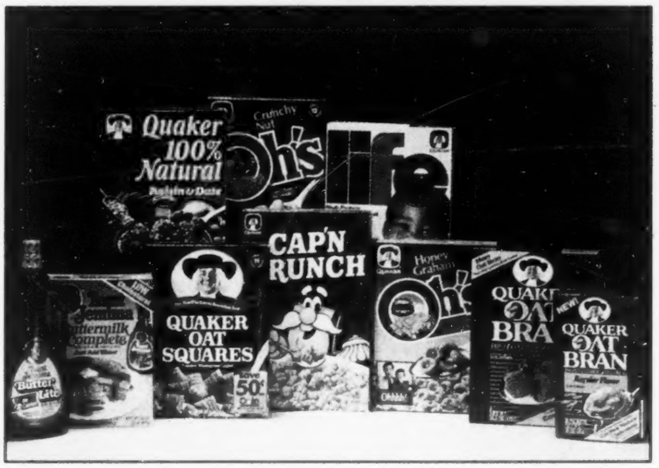
Grantor trusts key to deals

By Marlene Givant Star

A dozen corporations — including Exxon, Square D, Quaker Oats, Xerox and AT&T — have reaped substantial savings by privately placing more than $2 billion in ESOP debt with grantor trusts.

J.P. Morgan Securities Inc., New York, and NCNB Investment Banking Co., Charlotte, N.C., began doing the deals last year, refinancing debt associated with leveraged employee stock ownership plans formed prior to tax law changes. The two firms devised the grantor trust application.

Goldman, Sachs & Co., New York, closed its first such deal for Exxon Corp. June 20. Exxon earlier had refinanced some ESOP debt through J.P. Morgan. In addition, First National Bank of Chicago's merchant bank is working on a couple of grantor trust deals for public companies, and sources say The Travelers Cos., Hartford, Conn., will refinance ESOP debt with a grantor trust to be placed by Chase Manhattan Bank, New York.



Quaker Oats made the last of three private financings for its ESOP through the use of a grantor trust.

The strategy is popular now because companies want to refinance ESOP debt issued when interest rates were significantly higher than they are now.

At the same time, fewer banks are willing to lend to ESOPs this year because write-offs of bad real estate loans and other factors have changed the banks' tax-paying status, limiting their ability to realize tax benefits of ESOP loans.

Still, the market for such deals is fast becoming saturated. Only ESOPs formed before July 10, 1989, can benefit from refinancing through a grantor trust.

In these deals, a grantor trust simultaneously buys debt of an ESOP and finances that purchase by privately placing debt and equity. The loan is repaid by the ESOP, and the grantor trust repays its investors — 80% of them debtholders and 20% equity holders. The equity holders receive the tax advantages associated with the ESOP debt, but only a nominal amount of the interest repaid by the ESOP.

Buyers of the debt, which is taxable, receive the bulk of the interest.

Because they own the ESOP note, equity investors must be qualified lenders to ESOPs — largely banks and insurance companies — but bond investors may include all traditional debt buyers, from pension funds to insurance companies.

In a traditional ESOP financing, all lenders would have to be qualified lenders. Thus, the grantor trust structure broadens the investor base at a time when qualified lenders with tax capacity are limited. Targeting more investors generally means corporations can pay lower rates.

Tax advantages are available because the ESOPs refinanced with grantor trusts have been grandfathered under the old tax law, which provided for a 50% in-

See **Grantor trusts** *on page 34*

New fund makes big equity bet

By Leonard J. Hollie

Time Warner Inc.'s investment strategy for its newly combined $400 million defined benefit pension fund will have a heavy equity commitment, and will include its first international allocation.

The company has hired an international manager, two new domestic equity managers and a new master trustee. Other managers from the previous rosters have been retained.

Time Inc. had five defined benefit plans in its master trust with total assets of $250 million, and Warner Communications Inc. had 10 defined benefit plans in its master trust with assets of $150 million.

Merger of the assets was completed July 1, six months after Time acquired Warner in a $14.15 billion deal that created the world's largest

See **Time Warner** *on page 34*

DC plans tiptoeing abroad

By Curtis Vosti

When Halliburton Co. officials decided in 1985 to invest a portion of the company's defined contribution assets overseas, they got funny looks from the money managers they interviewed.

"When we first went into the ball game, a lot of eyebrows were raised," said Nathaniel Duffield, director of trust investments for Halliburton's $2.5 billion in profit-sharing and employee-directed assets. "I think we were the first defined contribution plan they had talked to about international investing."

Dallas-based Halliburton is not alone among defined contribution plans now investing overseas, but it is among the few. Of the Top 200 employee benefit funds in *Pensions & Investments'* annual survey of the nation's largest funds, 122 offer some sort of defined contribution plan. Only 15 invested internationally (*P&I*, Jan. 22). Together, the 15 accounted for $5.3 billion in international investments — a far cry from the $34 billion the Top 200 defined benefit plans have put overseas.

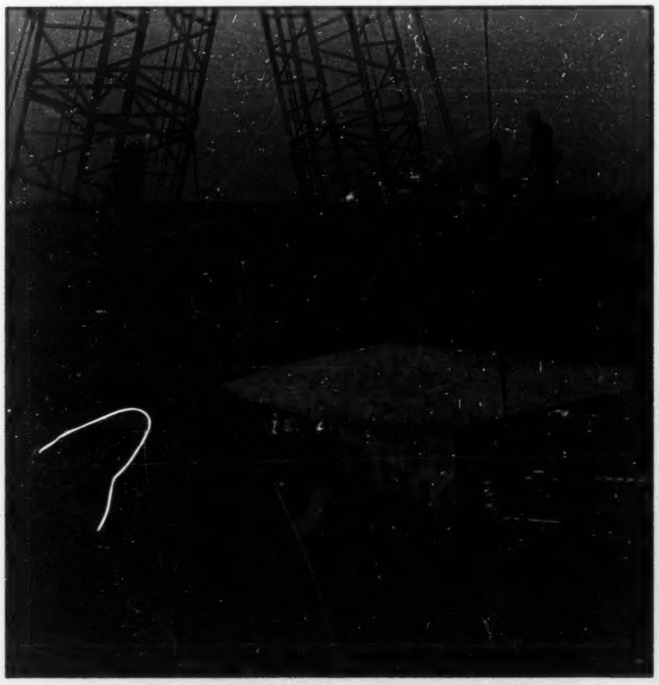
One reason for the gap might be that it's not an obvious option for employees to choose.

In many defined contribution plans — which can combine both company and employee contributions — employees choose investment options for the assets. Many companies do not give the employees a separate option to invest internationally because they think there is not enough interest.

That might change when the Department of Labor's regulations on fiduciary responsibility in defined contribution plans are released.

"A lot of plan sponsors have

See **Overseas wave** *on page 35*



Halliburton, which is working on this road project in Houston, was a pioneer in giving employees the option to invest overseas.

NEWS DIGEST

Robert Shultz will oversee some existing client relationships and new product development in his new job with Trust Co. of the West. Page 4.

Photo by Tom Reed

Rep. Peter Visclosky, speaking at a conference sponsored by *Pensions & Investments*, said he intends to introduce legislation that would change the full funding limits passed in 1987 that he called a mistake. Highlights from the speeches of Rep. Visclosky and other conference speakers begin on Page 6.

FINANCING

Refinancing ESOP-related debt through grantor trusts has attracted a dozen corporations and more than $2 billion in private placements. Page 1.

Disney, Du Pont and Illinois Tool Works have taken advantage of a new wrinkle in convertibles. Page 3.

A bankruptcy law change allows swap deals to be treated on a net basis. Page 24.

Merrill Lynch remained atop the global and domestic underwriting rankings for the first half of 1990. Page 31.

INTERNATIONAL

Halliburton is among the few companies whose defined contribution plans have added foreign investments to their portfolios. Page 1.

The United Nations Joint Staff pension fund seeks to save time and money when its internal global custody system is up and running. Page 3.

The Japanese financial system is undergoing unprecedented regulatory changes. Page 22.

REAL ESTATE

BP America's suit seeking the pension fund's withdrawal from First Chicago's Fund F has the Illinois Municipal Retirement Fund watching closely. Page 2.

Travelers Cos. officials claim the insurer has fulfilled its fiduciary responsibility in response to a suit by the Dallas Police and Fire Pension Fund. Page 20.

JMB Institutional Realty will target developers as a source of deals for its fifth commingled fund. Page 31.

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Real estate survey under way

Questionnaires for *Pensions & Investments*' annual survey of real estate investment advisers have been mailed. The deadline for return of the questionnaires is July 29; the survey will be published Sept. 3. If you qualify for inclusion and did not receive a questionnaire, or have questions about the survey, please contact Christine Philip, directory coordinator, at (312) 649-5217.

Minority firms get boost

California Teachers hires 3

By Steve Hemmerick and Terry Williams

The California State Teachers' Retirement System allocated a total of $600 million to eight new equity managers, including $150 million to three minority firms.

In another development, the State of Connecticut Trust Funds plans to set up a farm team of minority- and women-owned and other emerging money managers that would invest about 10% of the fund's $3.25 billion in equity assets.

Thomas Flanigan, chief investment officer for the $31 billion California Teachers fund, said trustees hired NCM Capital Management Group Inc., Durham, N.C.; Taplin, Canida & Habacht Inc., Miami; and WR Lazard & Co., New York, all firms with at least 51% minority ownership.

Trustees allocated $100 million to NCM Capital, a black-owned value manager; $25 million to WR Lazard, a black-owned growth stock manager; and $25 million to Taplin, Canida & Habacht, a value manager, the majority of which is owned by Hispanic women.

The other managers hired, their styles and allocations, are J & W Seligman & Co. Inc., New York, a growth stock manager, $100 million; Harris Bretall Sullivan & Smith Inc., San Francisco, a growth stock manager, $50 million; Waddell & Reed Asset Management Co., Kansas City, Mo., a rotational stock manager, $100 million; Oppenheimer Capital, New York, a value manager, $100 million; and Sasco Capital Inc., Fairfield, Conn., a value manager, $100 million.

Retained was Barrow, Hanley, Mewhinney & Strauss Inc., Dallas, a value manager, which had its allocation boosted $100 million, to $350 million.

The new allocations came from equity managers dropped during the previous 12 months. Mr. Flanigan declined to identify them.

To give minority firms a greater chance to be hired, California Teachers altered its requirement that a firm be in existence for five years and have $300 million to $500 million under management.

Now, key decision makers at a firm must have at least five years experience and manage at least $100 million.

What is important in hiring managers is the investment experience of the decision-makers in the firm, Mr. Flanigan said.

The rules change was prompted, by state legislation requiring state agencies to give 15% of the value of their contracts to minority-owned firms. Although the legislation permitted the pension fund to meet the 15% requirement by counting any contracts, such as a supplier of typewriter equipment, the pension fund wanted to give some of its assets to minority-owned money managers, said Mr. Flanigan.

The contracts are for three years, with two-year options.

Thomas Flanigan said the Teachers' fund altered search criteria to help minority firms.

Pension Consulting Alliance, a Glendale, Calif., consulting firm assisted in the manager search.

Although guidelines for selecting Connecticut's money managers won't be set until late August or early September, each manager likely will get $10 million to $15 million.

John Winchester, senior vice president and investment officer-pension fund analysis, the farm team will manage the same amount of money normally given to one active manager.

"Everything is preliminary," he said. "Nothing has been firmed up. It's nothing to rush into."

The Connecticut Trust Funds now has one minority money manager, Ariel Capital Management, Chicago, which oversees

See **States** *on page 33*

Kroy trustee hits DOL allegations

By Joel Chernoff

Valley National Bank of Arizona is crying foul against the Department of Labor.

Valley National is upset with the department's lawsuit of last December, which charged the bank with failing to conduct an independent investigation in permitting an employee stock ownership plan to take a 60% stake in the December 1986 leveraged buy-out of Kroy Inc., Scottsdale, Ariz.

The problem, Valley National argues, is not with its work but with the Labor Department's.

In its June 29 filing in the U.S. District Court for Southern New York, Valley National said the Labor Department had cleared the $78 million buy-out prior to its closing on Dec. 23, 1986. Now, the government has announced its policy affecting leveraged buy-outs that include ESOPs and other investors, and wants to retroactively apply it to the Kroy transaction, the bank charged.

The risk could be sizable for Valley National, especially because Kroy, a manufacturer of signage and lettering systems, has been crushed by the burden of debt it assumed in the buy-out. The company filed May 15 for protection from creditors under Chapter 11 of the Federal Bankruptcy Code in the U.S. Bankruptcy Court for Arizona.

While management and creditors are trying to work out a plan of reorganization, a derivative shareholders suit has been filed charging Kroy management with fraudulently perpetrating a scheme to strip the company of its cash while saddling it with huge amounts of debt while making false business projections.

But it's the Labor Department's lawsuit that has riled Valley National.

The department charged the bank had permitted the ESOP to purchase 60% of Kroy's common stock — 50.1% on a fully diluted basis — even though the ESOP was putting up 87% of the equity financing. Other investors, including management, contributed only 13% of total equity financing while receiving 40% of Kroy's stock on an undiluted basis.

The ESOP paid $5.92 for each of the 6 million shares it acquired, while other investors paid only $1.125 per share.

The department charged Valley National was responsible for the ESOP overpaying for the stock because the bank approved the transaction. In speeches made earlier this year referring to the Kroy case, department officials said an ESOP should receive "a dollar's worth of stock for each dollar the ESOP has invested" — the department's first clear iteration of its policy since it effectively had blocked Scott & Fetzer Co.'s proposed leveraged buy-out in 1985.

In addition, Valley National had stepped into the transaction

See **ESOP trustee** *on page 33*

BP America sues to get realty assets

By Terry Williams

CLEVELAND — BP America Inc.'s pension fund is suing First National Bank of Chicago to withdraw more than $17 million BP has invested in Fund F, an open-end real estate fund.

First Chicago also owes more than $41 million to the $4.3 billion Illinois Municipal Retirement Fund, Chicago, which has asked to redeem its share in the fund, said Robert L. Cusma, executive director. His fund is not a party in the BP suit.

The BP suit was filed May 18 in U.S. District Court in Cleveland. BP officials declined to comment, as did David Rowan, BP's lawyer, and Robert Herbert, counsel for First Chicago.

The bank is the trustee of the First Group Trust, which administers Fund F. BP first invested in Fund F in 1979.

In the suit, BP America alleges that First Chicago changed the redemption policy from a first-come first-served basis to a system of pro-rata distributions; that it invested in speculative properties after it became aware of its liquidity problem; and that First Chicago diminished

See **BP America** *on page 33*

FASB

Retiree health liability reckoning pushed back 1 year

■ Reacting to the loud and clear input from plan sponsors, the Financial Accounting Standards Board tentatively agreed to delay the effective date of its proposed change of accounting for retiree medical liabilities.

The date for changing to an accrual basis from a pay-as-you-go method tentatively was moved to fiscal year 1993 from 1992.

The board also tentatively agreed to allow immediate recognition of accrued liabilities on a one-time basis, said Jane Adams, project manager. Immediate recognition, which was not included in the exposure draft released in February, would be voluntary.

If the option is not selected, Ms. Adams said, accrued liabilities up to the effective date of the proposal would be amortized over a 20-year period, rather than the 15 years contained in the original exposure draft.

Ms. Adams said more than 90% of the responses to the exposure draft requested an immediate recognition provision. She said the one-year delay in implementation would allow companies and industry experts additional time in which to compile the medical claims and cost data on which to base projections under the proposal.

New data compiled by A. Foster Higgins & Co., Princeton, N.J., shows more than half of the employers who provide retiree health benefits have not yet determined their financial liability.

The survey, scheduled for release in July, also revealed that among employers who determined their retiree health liability, 47% found it higher than expected.

Lynn K. Cherney

John F.C. Parsons

REAL ESTATE

An about-face for next crop of CEOs

■ Real estate CEOs in 2000 will need experience in public affairs, environmental issues, international issues, financial planning, strategy setting, creative thinking and team leadership.

So declared John F.C. Parsons, strategic consulting partner, and Lynn K. Cherney, executive compensation partner, at Ferguson Partners Ltd., a Chicago business advisory services firm.

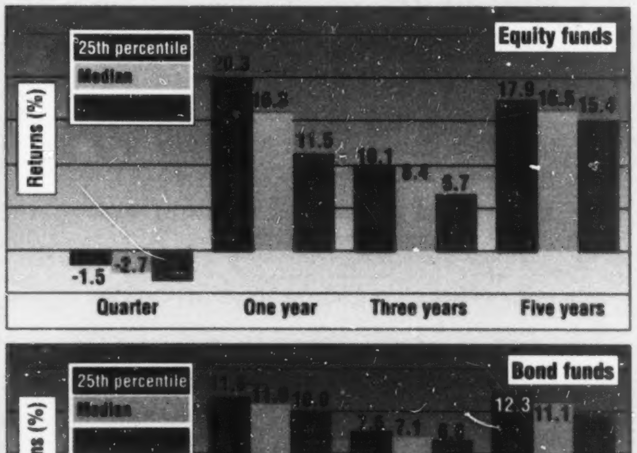
They developed the profile, noting the image of the chief executive officer as a deal-maker is gone as realty firms become service oriented rather than product driven.

"The service approach will be vital for real estate companies. They will need the fees generated by service to meet their cash flow requirements because of the limited demand expected for office, retail, residential and hotel property."

SEI universe performance

(periods ended March 31)

The S&P 500 Stock Index returned -3.0% for the quarter, 19.3% for the year, 8.9% for three years and 16.1% for five years. The Salomon Brothers Broad Index returned -0.8%, 12.2%, 7.5% and 11.7% respectively. Returns for periods greater than one year are annualized.



Source: SEI Corp., Wayne, Pa.

Graphic by Holly Seguine

INTERNATIONAL

'Matchmaker' bridges ocean

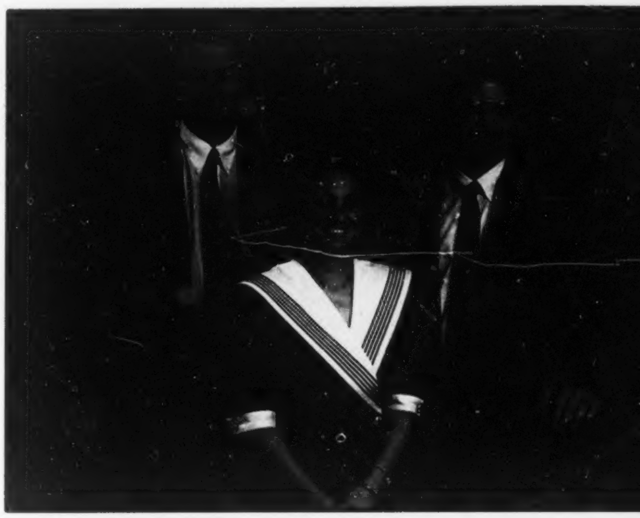
■ Interfinance Inc. is doing its part to get U.S. institutional investors up to speed on European investment opportunities — with a twist. The New York-based firm specializes in introducing Europe's small- to medium-cap, high-growth companies to American investors.

The firm hosts monthly luncheons for its institutional clients — including Yamaichi Asset Management and Equitable Capital Management — with the chieftains of Europe's fast-track companies.

So far this year, presentations have been made by Groupo Hispano Suiza, a Spanish importer of construction machinery; Attwoods PLC, a British waste management firm; Group Lyonnaise des Eaux, a French water treatment company; and Groupe Expand, a French drug marketing firm and television programming producer.

Interfinance — which is owned by Tuffier et Associes, a leading French broker — started out six years ago to promote French market investments to U.S. institutions.

Since it was formed, Interfinance has expanded to cover all of Europe, said Arnaud de Vienne, president.



James Blair, left, Sharon Manewitz and Damien Kovary of the workout group at TIAA, where active participation is the watchwor

PEOPLE

TIAA group sees innovation daily

■ Sharon Manewitz, Damien Kovary and their colleagues in the workout group at the Teachers Insurance and Annuity Association, New York, spend their days at the bargaining table figuring out how to save troubled investments and pressing bondholders' rights.

With dealmaking depressed and bank financing dwindling, they say the $49 billion pension fund is taking more equity stakes in revitalized companies. "Equity is becoming a greater component in the solution. . . . The exit strategy is leaning less toward mergers and acquisitions because you need financing — and it's not available," said Mr. Kovary, second vice president.

TIAA has lived by the motto that active participation in the workout process pays off in maxi mized recovery of assets and min imized losses.

For TIAA, "problem" loan range from companies relegate to the watch list with an earl warning flag to firms that hav filed for bankruptcy. These troubled investments make up les than 1.5% of TIAA's assets.

"It's very much a game withou rules," said James Blair, vic president-administration/finance who oversees the group.

Ms. Manewitz, an investmen officer, and Mr. Kovary find thei jobs challenging, partly becaus the fund is often a mezzanin lender instead of the first-in-lin senior lender. They say that give them more room to fashion creative solutions.

SWAPS

A big year in '89

■ The worldwide swap market approached $2 trillion in 1989, according to the latest survey by the International Swap Dealers Association Inc.

The total value of swaps outstanding in 1989 exceeded $1. trillion, up 46% from $1.3 trillio the previous year.

Of that amount, interest rat swaps accounted for about 75% o the total, or $1.5 trillion. Currency swaps accounted for another $435 billion.

SAVINGS & LOANS

Another stunner added to the list

■ Add one more mind-boggling estimate to the hodgepodge of conflicting best guesses of what it ultimately will cost taxpayers to bail out the nation's sick thrifts.

Goldman, Sachs & Co.'s estimated price tag is $183 billion, although the investment bank says "there is a significant risk that our estimate may be too low, in part because the losses on asset sales could be higher than we have estimated and the number of thrifts that may ultimately fail could be considerably greater than 1,000."

Astonishing as that $183 billion estimate is, it's lower than the General Accounting Office's $325 billion but higher than Treasury Secretary Nicholas Brady's best guess of somewhere between $90 billion and $130 billion.

Goldman's estimate includes not just the cost of liquidating 1,000 thrifts, but $50 billion to honor the income maintenance and asset quality guarantees of the Federal Savings and Loan Insurance Corp. and $10 billion for administrative expenses. The investment bank's estimate omits interest expenses and some other costs, such as capitalizing th FSLIC's successor, the Saving Association Insurance Fund which are included by the GAO Also unlike the GAO, Goldman' estimate is calculated on a presen value basis, which reduces th size of its estimate.

Thrift crisis costs

($ billions)

	Present value estimates		
	Goldman	Brady's	GAO [a]
Closing troubled thrifts	123	90 - 130	87
FSLIC guarantees	50		68
Administrative expenses	10		19
Interest			
RTC working capital			28
Refcorp interest			74
Financing Corp.			31
Other [b]			18
TOTAL	183	90 - 130	325

[a] GAO estimates cover [illegible] period except for interest, which includes all interest on outstanding FICO and Refcorp bonds until maturity.

[b] Lost tax revenue from FSLIC transactions and costs of establishing a Savings Association Insurance Fund.

Source: Goldman, Sachs & Co., New York.

OPINION

FROM THE EDITOR

Anti-military social funds irresponsible

Money managers and mutual funds that prohibit investment in defense stocks are implying the Constitution is immoral. At least, that's the way it seems to me. There are five "socially responsible" mutual fund organizations and possibly 10 money management organizations seeking pension assets that avoid defense stocks for moral, rather than investment, reasons.

Many of these investors and managers extend their restrictions to Treasury bonds and bills. Thus, they refuse to lend to the government money to carry out its constitutional mandate. I've never understood how it is "socially responsible" to seek to deny the government the wherewithal to defend the country in a still very dangerous world.

And I've never understood how it is socially irresponsible, or morally reprehensible, for companies to provide equipment the government needs to fulfill its constitutional mandate to defend the country.

The Constitution's preamble specifies the provision of the common defense as a major purpose of the union of the colonies into the United States. Article I, Section 8 of the Constitution gives Congress the power — in fact, the responsibility, in light of the preamble — to provide for the common defense. Section 8 is even more specific. It gives Congress the power to declare war, to raise and *support* armies, and to "provide and maintain a Navy."

Defense companies make it possible for the government to carry out its constitutional duties. If investors, by denying them capital, drove them out of business, or at least out of the defense business, the government's task would be difficult.

The government could buy all of its military equipment from foreign suppliers, such as the Japanese, the British or the French. But military supplies from such sources would be unreliable (if only because lines of supply could be interrupted) and might be far more expensive than they now are. The government could, alternatively, operate its own factories.

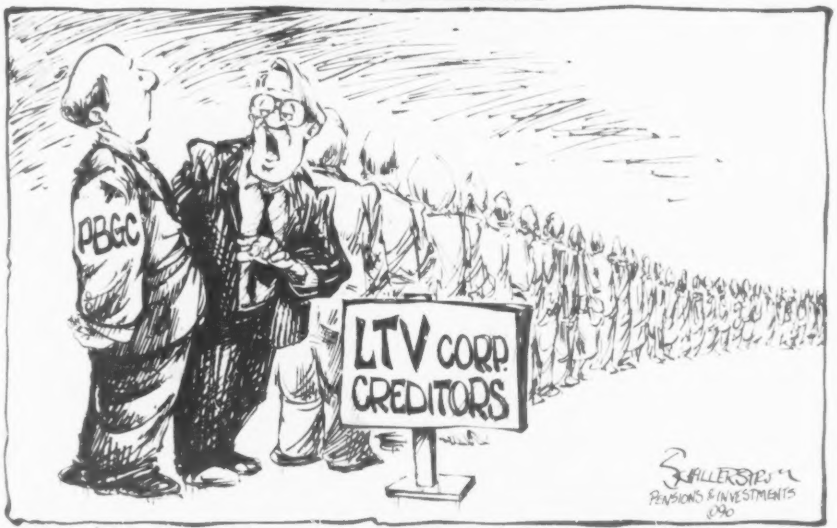
The investors and managers who exclude defense stocks do so on several grounds. First, according to Scott Klinger, vice president, Franklin Research & Development Corp., Boston, one of the first and most successful socially oriented managers, they don't want to participate in an industry that makes products the purpose of which is to kill people.

Second, they believe defense companies are less productive for the economy than non-defense companies. For example, intercontinental ballistic missiles simply sit in holes in the ground. Third, the defense industry is extremely cyclical, and on that basis is to be avoided.

The last point is a logical investment reason. The others I can't support. By the logic of the first reason, supporters of the non-defense stock approach should also demand the police either be pulled off the streets or patrol them unarmed. It ignores the possibility that being prepared for war might deter war and save lives.

By the logic of the second argument, they ought also avoid companies that produce anything that is purely ornamental or ephemeral, such as entertainment. Now, I wonder how these funds feel about companies that make war movies?

Mike Clowes



"YEAH, YEAH, YOU WON...SO, CONGRATULATIONS AND NO CUTTING IN LINE!"

LTV still a huge loss

The Supreme Court's decision to return $3.2 billion in liabilities from three pension plans to The LTV Corp. raises a number of questions, unanswered by the Pension Benefit Guaranty Corp.'s vindication by the ruling.

After nearly four years, the PBGC's battle with the Dallas-based diversified manufacturer isn't over yet. Since the plans' terminations in January 1987, the PBGC has paid some $300 million out of its own funds to pay beneficiaries, while during this same time LTV stopped paying millions in premiums for the pension guaranty insurance, the exact total unspecified. In addition, the PBGC assumed $230 million in unfunded liabilities of a fourth, salaried employees pension plan it isn't returning to LTV.

One question is the PBGC's standing among other creditors in the bankruptcy proceeding. It will have to seek reimbursement for those huge payments and subsidies. Those payments amount to among the largest liabilities the PBGC has ever assumed from a company, even after returning the $2.5 billion in unfunded liabilities of the three plans to LTV.

Another question is LTV's response to the Supreme Court's ruling. It hasn't addressed the ruling other than to reiterate its plea of poverty in paying these pensions. Altogether, the three LTV pension funds have only $700 million in assets to fund the $3.2 billion in liabilities. The court's decision will impede LTV's emergence from bankruptcy, according to analysts at major debt-rating companies, although the PBGC thinks LTV is financially fit, even after reassuming the unfunded pensions, to come out of bankruptcy.

That leads to another question: Just how healthy and competitive is LTV? Some justices believe there is serious doubt about such forecasts of its viability. The PBGC could one day find the LTV plans again in its hands, if the Supreme Court's decision pushes the company to the wall.

The future holds the answer to these questions. At this point, though, it makes sense to return the plans to LTV. If the decision had gone the other way, the questions might be about the long-term viability of the pension insurance program rather than about LTV.

SEC's measured idiocy

The Securities and Exchange Commission wants money managers to deduct fees from their investment performance in advertising materials. It's a bad idea.

Many pension industry executives oppose the new rule in unequivocal terms, calling it "mumbo jumbo," "idiocy" and "lunacy."

No one at the SEC appears to be listening to the complaints.

Such deductions for, say, mutual funds make sense, when everyone pays the same management fees.

But pension sponsors negotiate fees. The new rule won't help a pension executive's evaluation of money managers, because the average fees deducted from investment returns, as required by the SEC, will be either too high or too low from those that actually would be paid by the prospective pension fund client.

The rule is contrary to the performance measurement guideline of the Association for Investment Management Research. That standard, widely supported in the industry, shows performance before any deduction for fees.

The trend in the industry, pushed by pension sponsors, has been to unbundle costs. Under the SEC rule, managers may show for individual presentations performance without deducting fees. But it's a long process from a manager's first introduction to being invited by a sponsor for an interview. Much of the research in the initial screening comes from general materials of the manager. How is a sponsor served by comparing two managers, whose returns, net of fees, are identical, but whose performances before such fee deductions show a wide spread? The SEC hasn't explained. It should rescind the rule.

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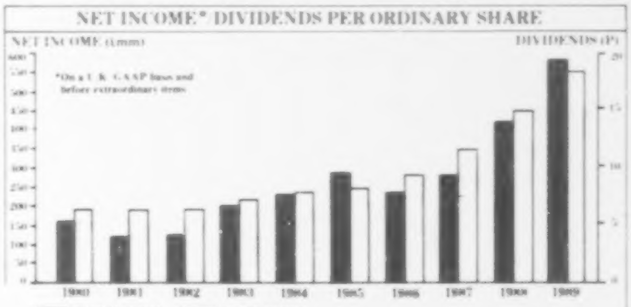

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Japanese businesses adapting to changes

An unprecedented rate of change in the regulation of the Japanese financial markets is touching virtually every business from insurance to securities, an investment banking study reveals.

The Japanese financial system is being restructured by the dual catalysts of changing regulation and domestic competition, according to the report, "The Japanese Banks: Emerging Into Global Markets," by Salomon Brothers Inc.

These changes will create more opportunities for banks and other financial institutions to raise money, and will set the stage for the fuller emergence of these gigantic institutions into the financial markets of the United States and a uniting Europe, the report said.

The continued deregulation of Japan's financial markets has been accompanied by the introduction of new products, the report said. One of the biggest success stories has been the creation of commercial paper, which is rapidly being followed by swaps, futures and options.

Japanese banks also are willing to take bold steps, according to the report. For example, the recently announced merger of Mitsui Bank and Taiyo Kobe Bank will create Japan's second largest institution.,

The deregulated financial markets in Japan and abroad are forcing the banks to develop the skills and customer bases necessary to be effective players in the global capital markets, the report said.

Changes in Japan's financial market regulations, according to the report, fall under five broad areas: deregulation of interest rates in the deposit and loan markets; restructuring of the domestic money markets by the Bank of Japan; a detailed reconsideration of Article 65, Japan's version of the U.S. Glass-Steagall Act, which separates the banking and securities businesses; changes in the pensions, investment management and savings sectors; and rapid development of new markets in commercial paper, mergers and acquisitions and futures and options.

The report focuses on eight of Japan's largest banks — Bank of Tokyo, Dai-Ichi Kangyo Bank, Fuji Bank, Industrial Bank of Japan, Mitsubishi Bank, Mitsui Bank, Sanwa Bank and Sumitomo Bank — which raised an unprecedented $19.6 billion in 18 months, primarily from the domestic equity markets. ■

PIPER addendum

Editor's note: *The following firms had funds that missed the deadline, were omitted or were in error when listed in the Pensions & Investments' Performance Evaluation Report for periods ended Dec. 31. All figures, except PIPER and PIPER+ international, are for funds that would have placed in the top two deciles of their universe. Information was provided by Robin Stadler of Rogers, Casey & Associates, which compiles PIPER and PIPER+. All figures for periods of more than one year are compound annualized.*

Mutual of New York's Fixed-Income PIPER Private Placement Fund returned 5.5% for the quarter, 10.6% for the three-year period, 12.9% for the five-year period and 12.7% for the 10-year period.

Provident Capital's International PIPER Low P/E Fund returned 4% for the quarter, 23.4% for one year and 23.5% for three years.

State Street Bank's International PIPER Index Fund returned 4.6% for the quarter, 10.8% for one year and 20.9% for three years.

Bridgewater Asset Management's Fixed-Income PIPER+ Market Timing Fund returned 4.5% for the quarter, 20.6% for the year, 11.2% for three years and 18.7% for five years. ■

Bankers' fees tumble despite rise in volume

By Marlene Givant Star

The U.S. new issues market steamed ahead in the first six months of 1990 to $163 billion thanks to a booming stock market and a surge in mortgage- and asset-backed securities.

Yet the 13% rise in new issue volume failed to salvage fee income of investment banks. Disclosed fees tumbled to their lowest level in five years — $1.2 billion — reflecting the departure of both the high-yield market and takeover fever.

"The loss of the junk-bond market is synonymous with the end of the era of huge fees," noted a report by Securities Data Co., Newark, N.J.

While the investment banking business is changing to adapt to the low fee environment, the first half's underwriting rankings held few surprises. Merrill Lynch & Co., New York, took top honors domestically and worldwide, reflecting its strength in the retail market and in asset-backed securities and corporate bonds.

The only big shift in rankings occurred in the global arena, where Japanese investment banks, excluding top-ranked Nomura Securities Co. Ltd., lost ground to Swiss and German banks. Global underwriting as a whole declined 28% as the Tokyo stock market decline had repercussions in the Eurobond market and international stock markets.

The declines in corporate bond issuance and initial public offerings, coupled with the the lull in junk bonds and mergers and acquisitions, have changed the dynamics of the underwriting business.

"Stock prices are high but people are concerned about the economy and financial risks and that has put a chill on all kinds of underwriting generally," said John Keefe, vice president of Barclays de Zoete Wedd Securities Inc., New York.

Even with well-publicized brokerage firm cutbacks, "with this much weakness underlying the underwriting process, do firms really need to be this big?" he added.

First half 1990 underwriting rankings

(Full credit to book manager)

All issues - global

Manager	Volume ($ mils.)	Market share (%)
1. Merrill Lynch (1)	28,835.5	11.4
2. Goldman, Sachs (3)	24,114.7	9.5
3. First Boston* (2)	23,605.9	9.3
4. Morgan Stanley (6)	20,080.7	8.0
5. Salomon Brothers (5)	19,805.0	7.8
6. Lehman Brothers (7)	12,912.9	5.1
7. Bear, Stearns (12)	11,690.6	4.6
8. Nomura Securities (4)	9,419.3	3.7
9. Kidder, Peabody (14)	9,206.5	3.6
10. Prudential-Bache (13)	6,953.2	2.8

* First Boston/Credit Suisse First Boston
Numbers in parentheses show the firm's first-half '89 ranking
Source: Securities Data Co., Newark, N.J.

All issues - domestic

Manager	Volume ($ mils.)	Market share (%)
1. Merrill Lynch (1)	26,302.5	16.1
2. Goldman, Sachs (2)	21,187.9	13.0
3. First Boston (3)	17,655.7	10.8
4. Morgan Stanley (7)	17,581.1	10.8
5. Salomon Brothers (4)	16,128.8	9.9
6. Bear, Stearns (8)	11,690.6	7.2
7. Lehman Brothers (5)	11,498.1	7.1
8. Kidder, Peabody (10)	8,963.7	5.5
9. Prudential-Bache (9)	6,864.3	4.2
10. PaineWebber (11)	3,643.7	2.2

Numbers in parentheses show the firm's first-half '89 ranking
Source: Securities Data Co., Newark, N.J.

Disclosed fee analysis

Manager	Volume ($ mils.)	Market share (%)
1. Merrill Lynch (2)	172.6	14.9
2. Goldman, Sachs (3)	171.7	14.8
3. Alex. Brown & Sons (9)	114.3	9.8
4. Salomon Brothers (8)	107.4	9.2
5. First Boston (4)	89.5	7.7
6. Morgan Stanley (10)	82.4	7.1
7. PaineWebber (6)	80.0	6.9
8. Lehman Brothers (5)	78.6	6.8
9. Smith Barney (11)	49.2	4.2
10. Kidder, Peabody (14)	24.9	2.1

Numbers in parentheses show the firm's first-half '89 ranking
Source: Securities Data Co., Newark, N.J.

One thing is certain — Wall Street lost its sex appeal this year. Government-guaranteed mortgage- and asset-backed securities were king in the first half, accounting for 55% of all money raised in new issues.

Declining bond prices and higher than anticipated interest rates sent the corporate debt market into a tailspin. Only $54.1 billion was raised during the first half of 1990, a 26% decrease from 1989's comparable period — representing the smallest amount of money raised in the sector since the second half of 1985. More than 70% of the issues were rated single A or better.

Bond investors flocked to the safety of government-guaranteed issues. Asset- and mortgage-backed securities had their greatest semiannual volume to date, raising $89.8 billion in the first half vs. $56.4 billion in the first six months of 1989. First Boston Corp., New York, was the top underwriter with $11.7 billion for a market share of 13.1%, relying on asset-backed securities for 43% of its business. Bear, Stearns & Co., New York, with 96% of its business coming mortgage-backed securities, was a very close second with $10.3 billion and an 11.4% market share.

Merrill Lynch was No. 1 in straight debt, excluding mortgage- and asset-backed securities, raising $13.6 billion for a market share of 25.1%. The structure of its business changed dramatically, with issuance by commercial banks and savings and loans sinking to 10% from 25% of underwriting activity. Morgan Stanley & Co., New York, was the only bank to almost double its market share in straight debt, to 23.2% in 1990 from 11.7% a year earlier. It ranked second, with $12.5 billion.

Merrill Lynch retained its top position domestically, with $26.3 billion in overall new issues, but its market share slipped to 16.1% from 17.5% because of a decrease in equity-related activity. The firm's stock underwriting market share fell to 9.4% from 13.9% in the 1989 period. Goldman, Sachs & Co., New York, took second place in total domestic new issues, raising $21.2 billion.

The lack of issuance by financial institutions prompted both firms to turn to industrial issuers for about 20% of their financings, according to Securities Data. First Boston ranked third with $17.7 billion and a market share of 10.8%.

Globally, Merrill Lynch, with $28.84 billion, was the No. 1 underwriter, capturing 11.4% of the $252 billion marketplace. Goldman, Sachs ranked second with $24.1 billion and a 9.5% market share.

The stock market's renewed strength and the desire of companies to deleverage by issuing stock to retire debt catapulted common stock offerings to 308 in 1990's first half vs. 184 a year earlier. Volume surged 45% to $12.9 billion. Goldman, Sachs was the leader with $2.5 billion and a 19.1% market share.

Initial public offerings slumped, raising only $7 billion, apace with the meager $6 billion raised in the 1989 period. Alex. Brown & Sons, Baltimore, took the top underwriting spot in IPOs with $1.5 billion, mostly in closed-end funds.

The dive of the Tokyo stock market and higher interest rates in Japan affected European markets as Eurobonds and international equities dropped 28% from their first-half '89 level to $89.6 billion in 1990's first half.

Despite a 50% drop in dollar volume, Nomura Securities, Tokyo, remained on top of the Euromarket charts with $8.5 billion representing 9.4% of the market. But other Japanese banks that had topped the leagues in the 1980s were displaced by Deutsche Bank, Credit Suisse First Boston and Union Bank of Switzerland, taking second, third and fourth places, respectively.

Bonds denominated in European currency units soared to a record $11.4 billion, representing an increase of more than $5 billion from 1989's first half. This corresponded to a market share increase to 14.3% from 5.4%.

Japanese companies' Eurobond issuances plunged to $10.2 billion from $43.4 billion. The collapse of Tokyo stock market extinguished Japan's market for bonds with warrants, which previously had represented 87% of all Japanese Eurobond offerings. ■

JMB set to close 5th fund

Properties to come from cash-strapped developers

By Steve Hemmerick

JMB Institutional Realty Corp., Chicago, is about to close a $380 million commingled real estate fund that should benefit from the current bank and savings and loan liquidity crisis.

According to JMB executives, developers strapped for cash for new projects now are more willing to sell interests in some of their best properties.

More than 36 pension funds contributed to Fund V. Despite the number of contributors, it appears the fund will close with less than the $400 million to $500 million JMB had sought.

Pension fund contributors include Amsted Industries; Anheuser-Busch; Bell Communications Research; Booz, Allen Hamilton; city of Boston; California Teachers' Association; Christian Schools International; Colgate-Palmolive; Cook County (Ill.); Ernst & Young; Evangelical Health Systems; Ford Motor; Kellwood; Knight-Ridder; Louisiana Employees'; Massachusetts Institute of Technology; NADA Retirement Trust; New York State & Local Retirement Systems; Rohr Industries; Ryder Systems; Tallahassee (Fla.); Tulare County (Calif.); United Food & Commercial Workers International; and United Illuminating Co.

Although not yet closed, JMB has begun buying properties for the fund. It paid $18.2 million for an 85% interest in the Madonna Road Plaza, a 308,000-square-foot shopping center in San Luis Obispo, Calif.

The initial yield, according to JMB executives, is about 7%. However, because of local building constraints, population growth and the possibility of redeveloping the regional mall, JMB estimates the final total return on the project to be 11.5%.

Built in 1968, the plaza serves San Luis Obispo County, which JMB contends is a prime growth area in California.

The remaining 15% interest in the Madonna Road Plaza is held by a JMB fund for endowments and foundations.

JMB Fund V also paid $43.3 million for a 50% interest in 1200 New Hampshire Avenue, an eight-story, 272,000-square-foot office building in Washington. An unidentified JMB separate account client bought the other 50%.

The building is 100% leased to the law firm of Arnold & Porter. When that lease expires in 1994, JMB plans to renovate the building and re-lease the office space to multiple tenants. Because of rigid zoning laws and other barriers, JMB should be able to raise rents, JMB executives said.

While the initial yield to JMB Fund V participants should be about 7%, the expected total return should be 11.1% when the building is sold.

An official for one of the funds that invested with the JMB fund, O. Gerald Fields, chief executive officer for the Tulare County Employees' Retirement Association, said JMB's sheer size and its past performance were some factors in choosing to invest in Fund V.

"I think mainly we like the size of the company (JMB), and we liked the diversification offered by their investment goals, in terms of geography and property types," said Mr. Fields.

His fund put $5 million in the JMB fund. Tulare County has about 11% of its assets in real estate and a target of 15%. The San Francisco branch of the consulting firm SEI Corp. assisted the Tulare fund in its search.

Real estate funds now in the process of investing assets are likely to find opportunities they wouldn't ordinarily see, according to Paul Saint-Pierre, president of the real estate consulting firm Pension Realty Advisors, San Francisco.

Mr. Saint-Pierre agrees with JMB officials that because of the tightened bank and savings and loan regulations, less money is available to developers.

As a result, developers are more willing to offer interests in some properties they hold, or sell them outright.

"The Homart-Yarmouth fund is a classic example of that," said Mr. Saint-Pierre. Earlier this year, Homart Development Co., Chicago, announced an agreement with The Yarmouth Group, New York, to offer a private placement real estate investment trust, Homart Institutional Partners, which will attempt to raise $700 million from domestic and foreign institutional investors. The trust is composed of property owned by Homart.

"We've seen others working on a couple of (similar) transactions, where they come to the market in an investment banking type of transaction where a developer is stapled together with an investment manager, and the investment manager is out shopping the whole package," said Mr. Saint-Pierre. ■

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AT DEADLINE

Travelers, investors to meet

In an apparent effort to mollify restless investors, officials of Travelers Insurance Co. Separate Account R have agreed to meet July 26 with participants in the troubled commingled real estate fund.

The fund has been the center of controversy and at least one lawsuit. Some investors, including the Dallas Police and Fire Pension Fund and the Maine State Retirement System, have been seeking the return of their investments in the fund since 1986.

ESOP notes refinanced

American Express Co. has refinanced $112.4 million of floating-rate notes issued to fund its ESOP using a grantor trust, the most recent company to employ the strategy.

The grantor trust structure allowed American Express to achieve what might be the lowest rate ever on ESOP-related debt.

No rate was disclosed, but American Express reportedly paid 8 to 10 basis points less than Exxon Corp. did in its issuance in which it paid a spread of 90 to 100 basis points over Treasuries.

Managers, consultant hired

Avatar Associates has been hired to manage a tactical asset allocation account of undisclosed size for the $1.7 billion ICMA Retirement Trust, Washington. . . . The Howard Hughes Medical Institute, Bethesda, Md., has hired Trust Co. of the West to manage a high-yield bond account for its $5.6 billion endowment. A fixed-income account managed by Fidelity Trust Co. was terminated. Account sizes were not disclosed. . . . The $9.5 billion Pennsylvania State Employes' Retirement System has retained Ronald A. Karp Associates as its real estate consultant.

Whatley quits Russell

J. Anthony Whatley has resigned as senior vice president and director of marketing and sales for all Frank Russell companies and divisions.

Mr. Whatley, who had been with Frank Russell 13 years, said he intends to go into business for himself, probably in money management. No immediate replacement will be named, said George Russell Jr., chairman of Frank Russell.

Personnel shifts

Gilbert Garcia, a former Salomon Brothers Inc. mortgage-backed securities specialist, has joined Cisneros Asset Management Co. as a partner. He is the first addition to the year-old firm's portfolio management group . . . Gary N. Yalen, formerly executive vice president of the recently merged Bank of New York/Irving Trust has been appointed chief investment officer of AMEV Asset Management, which runs $2.1 billion in investment portfolios.

Budget crunches smite state funds

By Trudy Ring

Nine states are expected to trim more than $1 billion from their pension fund contributions through actuarial changes as public officials seek ways to cut spending.

At least one other state — Illinois — is reducing contributions without making any actuarial changes.

While some pension officers warn such cuts might be shortsighted, other state officials find pension contributions a relatively painless and politically safe area to cut spending during budget squeezes. Also, the excellent performance of the capital markets in recent years has made pension funds look as though they could do with lower contributions.

"What (states) save this year will cost them a lot more over the years to come," said Edwin C. Gallison, director of the $7.8 billion Arizona State Retirement System, Phoenix.

The Arizona Legislature last year changed the actuarial method specified in law to the projected unit credit method from the entry age normal method, the result being a $281 million reduction in accrued liabilities and a smaller contribution from the state, he said.

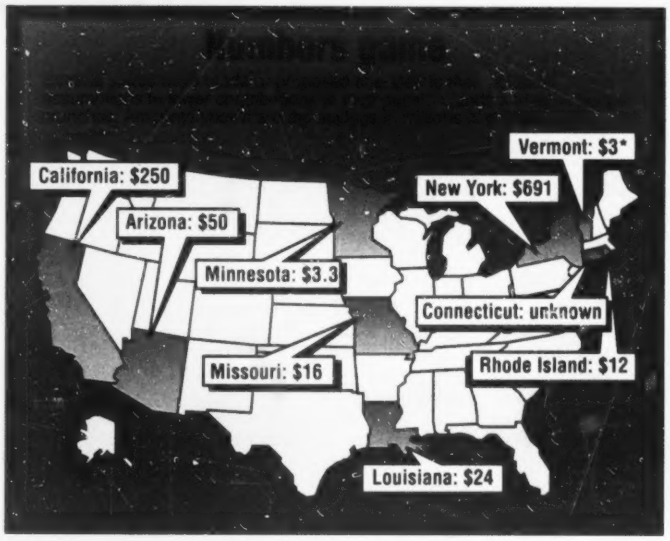
The other states that reported some changes were California, New York, Connecticut, Minnesota, Louisiana, Rhode Island, Vermont and Missouri. Officials at 49 states were interviewed for this story; Wisconsin officials did not respond by press time.

Some finance experts say there's nothing inherently wrong with changing assumptions to reduce contributions.

Many public pension funds did well in the bull stock market of the 1980s, and many are well-funded — an average of 75% for large state plans, said Cathie Eitelberg, director of the Government Finance Officers Association's pension and benefits program. It's naive to think governments won't look at contributions in budget crunches, she said.

Also, there are numerous differences of opinion on the soundness of various actuarial methods, she

See **States** *on page 34*



PG&E's Sunny Oberoi is bullish on foreign investments.

Photo by Linda Sue Scott

'Ahead of the pack'

Sunny Oberoi keeps PG&E in forefront

By Steve Hemmerick

SAN FRANCISCO — The $3.1 billion Pacific Gas & Electric pension fund has invested 15% of its assets in foreign stocks, two to three times the typical pension fund's allocation.

And Sunny Oberoi, direct-investments and benefit finance, doesn't expect to stop there. He and his pension committee hope to increase the amount to 25%.

"We're ahead of the pack," said Mr. Oberoi, considered by industry professionals to be one of the brightest, most forward-thinking pension executives.

Indeed, PG&E's pension fund has been out of Japan since the first of the year, missing the 26.7% slide in that market between Jan-

See **Oberoi** *on page 33*

Tax talk invading pension sanctuary

Securities levy may slash fund revenue

By Hillary Durgin

Some pension industry experts are running scared over talk of a broad-based securities tax that could cost pension funds nearly $1.6 billion in annual revenue.

"It's the first obvious invasion into the private pension system from a tax point of view," said Roger C. Bransford, national director-asset consulting for TPF&C, a Towers Perrin company, Atlanta.

Public fund officials argue the tax would slash revenue, forcing employers to increase taxes and shear benefits. California's five largest pension funds, for example, would lose $134.2 million annually, said James D. Mosman, chief executive officer of the California State Teachers' Retirement System.

But corporate pension executives consider a tax on securities transfers preferable to other, more direct tax options.

And now that lawmakers have sharpened their tax-collecting scalpels, many corporate executives are resigned to some form of broad-based tax so the Bush administration can address the nation's $168.8 billion deficit.

"The notion that the private pension plan is going to try to escape that (tax) is Alice in Wonderland," Mr. Bransford added. "This is too big a potential source of revenue enhancement for them not to do something with these funds."

The 0.5% tax, known as the securities transfer excise tax, would cost a $500 million pension fund with a 25% turnover rate about $625,000 annually, estimated Philip Grant, partner with Hewitt Associates in Rowayton, Conn.

The tax would apply to individuals, corporations and tax-exempt institutions on sales of stocks, bonds, options and foreign trades by Americans. Treasury securities would be excluded.

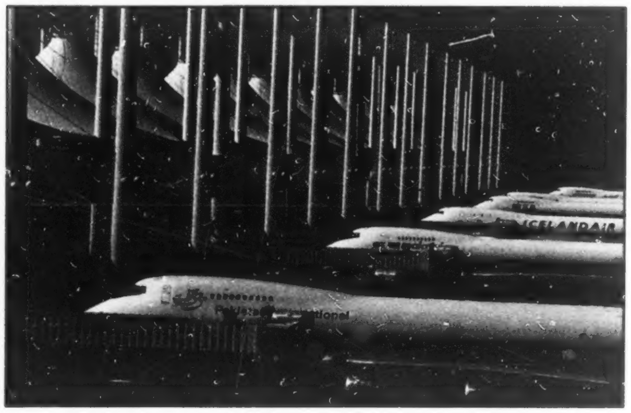
While the tax has not been proposed officially, it is one of many revenue-raisers budget summit negotiators are considering to reduce the deficit.

As outlined by the Congressional Budget Office in its annual list of spending and revenue options, the levy would net $7.8 billion in 1991 and $57.7 billion during the five-year period through 1995. It could not be learned what turnover rate was assumed in those estimates.

Pension funds would contribute about $1.6 billion in annual revenue if a 0.5% tax were levied, estimated Philip Schneider, consultant with Wyatt Asset Services, Chicago. Mr. Schneider's calculation assumes a conservative 20% annual turnover rate and is based on total plan assets of $1.6 trillion — excluding private insured assets — as estimated at the end of the first quarter by the Employee Benefit Research Institute, Washington.

See **Transfer** *on page 34*

NEWS DIGEST



The leveraged buy-out of Parsons Corp., contractor for the Jeddah International Airport in Saudi Arabia, by its ESOP was upheld by a federal judge. Page 24.

Fallout from Pennsylvania's anti-takeover law is mounting, with as many as 23 companies opting out of all or some provisions. Page 4.

P&I**'s Corporate Top 50** survey shows the health of the largest defined benefit plans remains strong. Page 23.

SPECIAL REPORT: FOREIGN BUSINESS

U.S. money managers posted substantial gains in both equity and fixed-income assets managed for foreign institutional clients despite flat market performance during the year ended March 31. Page 21.

FINANCING

Bear Stearns and Salomon Brothers are among those working on asset-backed deals to provide Eastern Europe with needed capital. Page 3.

INTERNATIONAL

PG&E's Sunny Oberoi hopes to boost the pension fund's foreign equity exposure beyond 15%, keeping it at the fore among global investors. Page 1.

Connecticut, Rhode Island and GTE give their international managers regional mandates in an attempt to boost returns. Page 2.

REAL ESTATE

Realty advisers, coming to grips with their errors, turn to modern portfolio theory and other approaches to try to prevent future writedowns. Page 3.

The Shell Oil and AT&T pension funds are participating in the buy-out of Income Properties Inc., a publicly traded real estate investment trust. Page 6.

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Real estate survey under way

Questionnaires for *Pensions & Investments'* annual survey of real estate investment advisers have been mailed. The deadline for return of the questionnaires is July 29; the survey will be published Sept. 3. If you qualify for inclusion and did not receive a questionnaire, or have questions about the survey, please contact Christine Philip, directory coordinator, at (312) 649-5217.

Equity exposure cut 20%

Missouri State Employees' drops realty, venture capital

By Marlene Givant Star

JEFFERSON CITY, Mo. — The $1.6 billion Missouri State Employees' Retirement System is cashing in on the bull market stock gains of the 1980s by reducing equities nearly 20%.

The fund also is phasing out real estate and venture capital investments. It has terminated Eastdil Realty Inc., New York, its only real estate manager, bringing in-house the management of the $120 million in properties.

The venture capital manager, Brinson Partners Inc., Chicago, will remain on-board until its investments can be profitably unwound, but the firm won't make new investments.

"It was a very good time in 1982 to go heavily into equities. . . . It's time to pull back and take some gains off the table," said Steve Yoakum, executive director of the Missouri fund.

The timing of the real estate allocation, on the other hand, was anything but fortuitous.

"In real estate we didn't start buying until 1983 and 1984, probably the peak of the market. Returns have been considerably less than stock over that time. Real estate was added as a defensive hedge, but now we don't see inflation as a major problem for us in the intermediate future. I hope we're right," he said, noting the decision was no reflection on Eastdil's performance.

Venture capital was considered too risky to pursue because investments tie up money for a long time, he said.

Within the equity asset class, the fund also has made some shifts. Great American Investment Management Co. Inc., St. Louis, was hired to run the fund's first stock index account. Assets for the $100 million index fund will be taken from a yield-oriented equity account managed by Philadelphia-based Delawar Investment Advisors.

Equities were reduced in Marc when the fund cut by $110 millio an account managed by Allianc Capital Management, San Francisco. Mississippi Valley Advisor St. Louis, was hired to manag the assets in an intermediate term, fixed-income account. Alliance now manages $190 million.

As an added bonus, the passiv hire and real estate terminatio reduced investment managemen fees by $1 million in 1989.

Fund officials are payin greater attention to investmen management costs, which ar mounting on an absolute basis a assets climb, even though they ar falling as a percentage of tota assets.

Over the last six months, th fund has added four internal investment and accounting analyst to handle real estate and othe asset classes.

See **Missouri** *on page 3*

Funds test regional waters

By Margaret Price

Pension funds increasingly are turning to regional foreign investing to gain more control over their international allocations and to try to boost their performance in certain regions.

Among those hiring regional managers are the $8.4 billion State of Connecticut Trust Funds, Hartford; the $2.4 billion Rhode Island Retirement System, Providence; and the $11 billion GTE Corp. pension fund, Stamford, Conn. GTE hired its first regiona manager, for Japan, two year ago. The fund now has three regional managers, including a second hired this year for Japan.

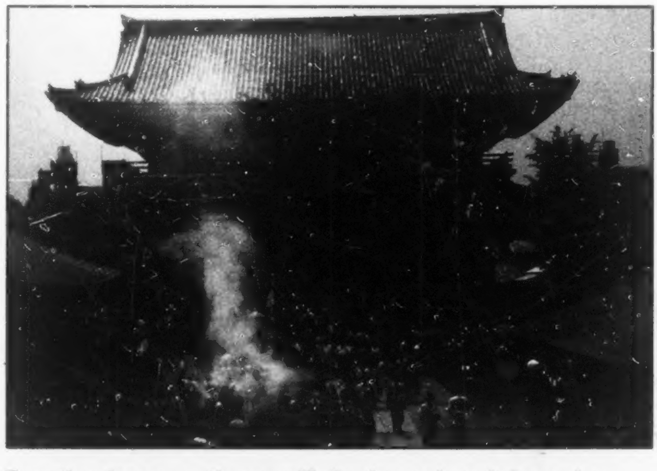


Photo by Margaret Price

Targeting Japan, or other specific foreign regions, is becoming more popular among pension funds investing overseas.

The IBM Corp. pension fund Stamford, Conn., reportedly i considering hiring regional managers.

These managers typically focu exclusively on markets of one region such as the Far East, Europ or Japan alone.

The regional phenomeno began about two years ago ami concerns about how much shoul be allocated to the Tokyo market By year-end 1989, pension fund had invested $3.1 billion in country or regional mandates, although they had $89 billion invested internationally, accordin to InterSec Research Corp., Stamford, Conn.

This year, however, interest i regional investing began to percolate.

World political/economic developments, such as those in Japa and Eastern and Western Europ "are now being played out in investment strategies," explaine Arthur McCain, InterSec vic

See **Regions** *on page 3*

Virginia overhauls operations

By Curtis Vosti

RICHMOND, Va. — The Virginia Supplemental Retirement System has restructured its "top-heavy" investment operations and abolished two positions created just a year ago.

It's difficult to ascertain the exact nature of all the changes made after the June 14 board meeting. Although four positions were eliminated and perhaps a dozen new reporting assignments made, there is no report upon which the changes are based and there hasn't been a consistent voice from system administrators about how the dust has settled.

But what is clear is following the February resignation of Board Chairman Charles Walker, the $12 billion retirement system is knee-deep in controversy.

Within the past six months the system has faced:

- a directive from Gov. L. Douglas Wilder to divest of South Africa holdings;
- criticisms of its disclosure policies;
- lawsuits about alleged illegal meetings;
- a ticklish situation involving a proposed merger, since called off, between two railroads, in one of which the system owned 20% of the stock; and
- strident criticisms from Mr. Walker, a consummate Virginia political insider who resigned over disagreements with Gov Wilder.

Observers say the system's restructuring appears to end a continuing battle between Mark Finn, a board member since th mid-1980s, and Mr. Walker, wh had been board chairman sinc 1981. In the past, the battle wa controlled by Mr. Walker, but with his resignation and the appointment of Jacqueline Epps a board chairwoman, Mr. Fin pushed the board to move on restructuring that he had bee proposing for a couple of years.

It was just a year ago that th board advertised for a deputy investment director and ended u hiring two Malcolm "Rudy"

See **Virginia** *on page 3*

PEOPLE

Pension fund business does have its share of quirks

■ To hear Paul Quirk talk, public pension fund executives deserve hazard or combat pay.

Mr. Quirk, executive director of the Massachusetts Pension Reserves Investment Management Board, has a long list of how, in public funds, "the businesslike way of running a pension fund gets diverted."

He shared some examples during a speech at *Pensions & Investments*' investment management conference in Washington last month:

- After making the front page of the Boston Globe for his business travels, Mr. Quirk now is seeking a corporate pension executive to co-author a book, "Plan Sponsor Resorts of the World."
- When the Massachusetts Legislature passed a bill requiring state funds to divest of stocks of companies doing business in South Africa, PRIM was all in bonds.
- Massachusetts politicians practically were shouting, "The British are coming," when a British firm tried to take over Norton Co., Worcester, Mass. Mr. Quirk, concerned about whether his fund would get caught in the crossfire, was "delighted" to discover Norton had a South African subsidiary. "That way, we didn't own the stock."

Photo by John Kennard

PRIM's Paul Quirk can attest to the trials and tribulations faced by many pension fund executives.

CORPORATIONS

Shareholders third in executive poll

■ Corporate executives believe they owe a great deal of responsibility to shareholders, but they put an even greater emphasis on responsibility to customers and employees, according to the results of a new survey.

The survey, commissioned by the New York advertising and public relations firm Brouillard Communications, found 97% of the 500 executives participating feel a great deal of responsibility toward customers, while 94% said they feel this way toward employees and 87% see this amount of responsibility to shareholders.

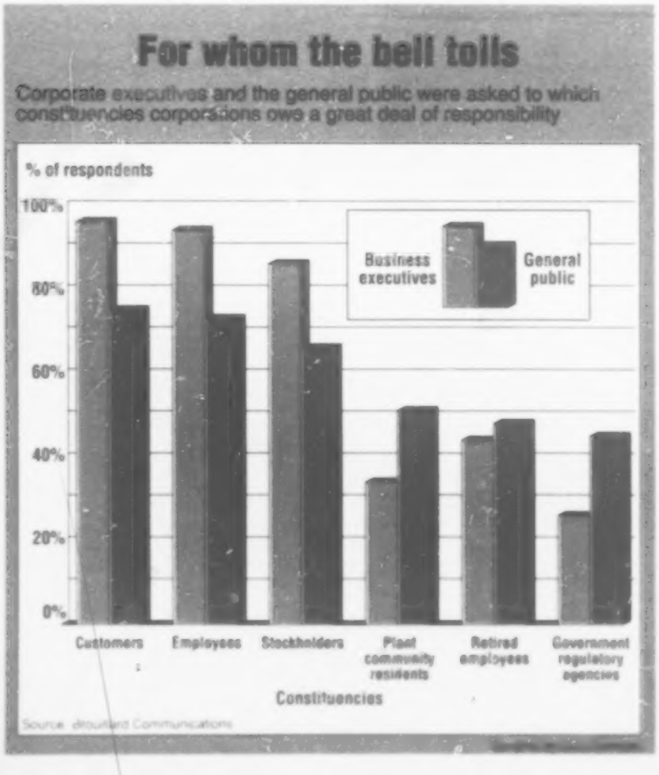
A smaller percentage of respondents assigned great corporate responsibility to plant community residents, retired employees and government regulatory agencies.

"During much of the 1980s, management's fiduciary responsibility to stockholders seemed to transcend everything else," said Jim Foster, president of Brouillard.

"Today, it looks as though corporate America has its sights on a broad constituency."

The general public's priorities are similar to those of the executives, the survey indicated. Among 1,000 members of the public surveyed, 76% said corporations owe great responsibility to customers; 73% said employees; and 66% said stockholders.

Opinion Research Corp., Princeton, N.J., did the study for Brouillard.



For whom the bell tolls

Corporate executives and the general public were asked to which constituencies corporations owe a great deal of responsibility

Source: Brouillard Communications

REAL ESTATE

Office vacancies to hover at 19%

■ The national vacancy rate for office buildings should remain about 19.2% for the next 24 months, according to a real estate research report by Salomon Brothers Inc., New York.

The report, "Weak Office Markets," said construction of office space slowed in 1989 by 90 million square feet compared with the peak in 1986.

The rate of increase in job growth, however, has declined along with the drop in construction.

"The nearly parallel descending paths of supply and demand make it clear market equilibrium is several years away and that a painful process of adjustment continues to lie ahead," the report stated.

Part of the reason for the fall in demand, according to the report, was the end of sharp growth in finance, insurance and real estate services. Those areas helped create the office property boom of the '80s.

The report said that through 1991, Austin, Texas will show the sharpest decline in office vacancies, to 26% in December 1991 from 32.1% as of December 1989.

The city with the sharpest climb will be Charlotte, N.C. It had 14.3% office vacancy in December 1989, and the Salomon report predicted a 1991 rate of 19.4%.

GUARANTEED CONTRACTS

BIC data tallied

■ Outstanding bank investment contracts totaled $7.5 billion at year-end 1989, or 4.4% of the $172 billion in outstanding BICs and guaranteed investment contracts, the Federal Reserve Board estimated.

Banks expect to issue another $3 billion in BICs in 1990, the Fed said. The survey also found 26 banks issue BICs, while another five plan to enter the market this year.

MONEY MANAGERS

Enhanced indexing gives firm a lift

■ Enhanced indexing has enhanced Advanced Investment Management Inc.'s business: the Pittsburgh firm's assets under management grew about $600 million during the second quarter.

Most of the growth is due to the enhanced stock index fund strategy, which accounts for about $800 million of the firm's $1.5 billion under management.

The newest clients for the strategy are the $16 billion Pennsylvania Public School Employes' Retirement System, Harrisburg, and the $2.5 billion Minnesota Mining & Manufacturing Co. pension fund, St. Paul, Minn. Neither fund would disclose the amount placed.

Other clients include Bayer USA Inc. and Westinghouse Electric Corp., both of Pittsburgh, and Hershey Foods Corp., Hershey, Pa.

The indexed strategy, which is enhanced with futures and options trades, carries no fee unless Advanced beats the Standard & Poor's 500 Stock Index by at least 30 basis points a year. If Advanced outperforms the index by the target amount or more, its fee is 0.3 times the outperformance.

From the beginning of 1990 through mid-June, the strategy beat the S&P 500 by 45 basis points, said J. Thomas Allen, Advanced president. In the past couple of years, its annual outperformance has amounted to between 150 and 200 basis points, he said.

Advanced intends to limit the amount it manages in the enhanced index strategy to $1 billion.

"There isn't infinite liquidity for the enhancements we offer," Mr. Allen said. "At some point it gets hard to make the elephant dance."

J. Thomas Allen of Advanced Investment Management.

Wyatt's Noriyuki Morimoto expects Japanese pension executives to want more information for determining asset allocations.

INTERNATIONAL

Wyatt's project unusual in Japan

■ The liberalization of pension investing in Japan has lured one U.S. consulting firm to the meat market.

The Japan Ham and Sausage Industry Employee Pension Fund, Tokyo, hired The Wyatt Co.'s Japanese subsidiary to handle what might be the first asset/liability modeling assignment awarded by a Japanese pension fund.

The fund provides pensions for 128 companies in the ham and sausage industry, and has 18.6 billion yen, or about $125 million, in assets.

The opportunity to link the actuarial side of pension evaluation with asset consulting is particularly important in Japan, where there are a number of plans that are not funded and where no other pension funds have done this type of forecasting, said Owen McCaffrey, vice president and actuary in Wyatt's Chicago office.

The consulting assignment also affords Wyatt entry into the traditionally impenetrable Japanese pension business, according to Noriyuki Morimoto, asset services consultant with in Wyatt's Tokyo office.

"The most important thing will be investment policy," he said. It was "only three or four years ago (that) Japanese pension plan sponsors were allowed to set asset allocations," Mr. Morimoto said. "Now they are going to get more detailed information."

U.S. firms post big gains

Advisers run $112 billion for overseas clients

By Margaret Price

U.S. money managers reaped a substantial gain in assets from foreign institutional clients, a *Pensions & Investments* survey shows.

Sixty-nine investment management firms reported $112.341 billion under management from non-U.S. institutions as of March 31.

A year earlier, 49 managers reported $79.394 billion under management from non-U.S. institutions.

The 39 financial asset managers who responded to both this year's and last year's surveys saw their total assets from foreign clients surge 36.1% to $93 billion. Adjusted for market appreciation, their equity assets grew 54% and fixed-income, 43.6%. The managers reported totals of $33.57 billion in equities and $23.01 billion in fixed income.

The gains came despite a flat market for the year — the Morgan Stanley Capital International World index posted a −1.76% return and the Salomon World Government Bond Index advanced 2.56%.

Bankers Trust Co., New York, once again was the top firm in the survey's universe, (it was omitted inadvertently last year) with a total of $21.71 billion under management from overseas clients, up 42% from $15.263 billion last year.

Ranking second and third for the third year were Citicorp Investment Management, London, with $16.485 billion and Chase Investors Management Corp., New York, with $7.419 billion.

While most money managers reported increases in foreign business, a few firms — including The Boston Co. and Lazard Freres Asset Management, New York — reported drops.

The Boston Co. reported total foreign assets of $100,000 for the year ended March compared with $167 million the year before. Much of Boston Co.'s business from overseas clients last year was in structured investment products, a group that shifted to PanAgora Asset Management, Boston, a joint venture by Nippon Life Insurance Co., Osaka, Japan; Shearson Lehman Hutton Inc., New York; and Boston Co.

Lazard Freres' assets from foreign customers fell to $119 million from $135 million the year before. A Lazard Freres spokesman did not respond to a telephone inquiry about the drop.

H. Kent Atkins, executive vice president at Bankers Trust, cited the U.S. trade deficit — where money leaving the United States returned in the form of assets to be run by U.S. managers — in explaining his firm's 42% jump for the year.

Like a number of other top players in this arena, Mr. Atkins cited his firm's international stature, reputation and presence. "In a lot of these (foreign) markets, a firm's size and position are important positive features," he said.

"There is a comfort factor" for clients in dealing with such firms, and a "recognition that these people must have expertise," he said.

Mr. Atkins singled out Japan, from where the firm has attracted $6.477 billion in assets, noting Bankers Trust had been one of only nine foreign banks allowed to compete with Japanese trust and insurance companies in managing pension assets.

Citicorp not only benefits from its global investing ability but also its presence in 13 countries, according to Robert Troxler, the firm's director of cross-border marketing.

"We are very much involved with managing assets for local institutions," he said, adding many of these organizations prefer using local money managers.

In the past year, Citicorp further strengthened its network, integrating previously "free-standing" offices in Brazil, Chile, India and New Zealand "into the global Citicorp Investment Management organization," Mr. Troxler said.

But tightened foreign ties weren't the only keys to success for U.S. investment management organizations.

At Morgan Stanley Asset Management, New York, money under management from non-U.S. sources leapt 67% to $4.685 billion in the year ended March 31. Gail Reeke, vice president and international business manager, cited an appreciation among clients of the firm's management style — "a bottom-up value approach to international markets that is comparatively rare in money management circles."

That value approach has gained favor amid what she called growing "recognition that it works in the global marketplace and that it appeals to those concerned about the levels of certain markets, particularly Japan's."

Geographically, Bankers Trust obtained its single largest chunk of money — $8.907 billion — from Australia, while Citicorp's single largest chunk — $6.347 billion — came from Pacific Basin countries excluding Japan. The Middle East provided Chase Investors with $5.548 billion, its single largest source of foreign assets.

For money managers overall, Japan, followed by the Middle East, provided the two largest geographical sources of foreign assets.

Among types of clients, pension funds outshone other categories, providing U.S. managers with $22.572 billion. The second largest category was governments, which provided managers with $19.842 billion. Within this category, foreign banks were the laggards, providing a relatively slight $3.681 billion.

Among asset classes, active strategies — the traditional preference of foreign investors — remained dominant. Within this category, active equity investments remained the most popular, with $30.754 billion mandated for such accounts.

For Chase Investors, active fixed income was the single most popular investment category, attracting $2.837 billion from abroad.

A spokesman for the firm, who asked not to be identified, cited both the firm's "good and long-standing investment record in fixed income as well as the variety of fixed-income offerings" as reasons for its success.

The spokesman said the firm's investment products range from short-term investments to securitized mortgages and a broad range of quantitative offerings. Chase Investors also manages international bonds. ■

Foreign business

How assets are invested

	$ millions
Active equity	30,754
Passive equity	8,110
Active fixed	27,554
Passive fixed	89
Balanced*	29,742
Real estate equity	11,070
Venture capital	121
Cash	1,861
Other	2,498

Source of assets by clients

	$ millions
Pension funds	22,572
Insurance companies	15,883
Mutual funds	14,272
Corporations	14,525
Governments	19,842
Banks	3,681
Other	14,415

Source of assets by country/region

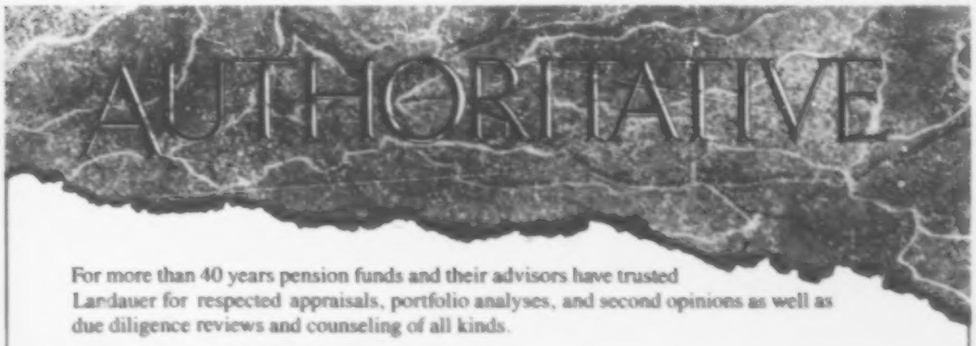
	$ millions
United Kingdom	12,284
Japan	24,947
Australia	13,130
Pacific Basin	9,350
Continental Europe	10,642
Canada	7,196
Middle East	21,899
Other	6,123

*Assets might be double counted in equity/fixed allocations

Top U.S. managers of foreign institutional assets

Firm	$ millions
Bankers Trust	21,710
Citicorp Investment	16,485
Chase Investors	7,419
Morgan Stanley Asset	4,685
CIGNA	4,240
Yarmouth Group	4,100
Capital Group	3,791
Wells Fargo Nikko	3,743
Chemical Investment	3,623
Rosenberg Institutional	3,532
Fischer Francis Trees	3,333
Alliance Capital	3,240
State Street Bank	3,103
Equitable Real Estate	2,541
Merrill Lynch Asset	2,082
Putnam	1,980
Equitable Capital	1,960
Brown Brothers Harriman*	1,696
Templeton, Galbraith	1,606
Batterymarch Financial	1,578
Manufacturers Hanover	1,514
Corporate Property	1,450
Continental Asset	1,434
Scudder, Stevens & Clark*	967
Schroder Real Estate	789
Fidelity Management Trust	766
Posthorn Global Asset	712
Fayez Sarofim	650
Atlanta Capital	592
Grantham Mayo V. Otterloo	560
Wellington Mgmt.	553
Pacific Investment	547
PanAgora Asset	486
Prudential Equity	386
Dewey Square Investors	385
Mitchell Hutchins	373
Smith Barney Capital	365
Dimensional Asset	336
Webster	234
Prudential Asset	233
Boston Int'l Advisors	195
Miller, Anderson & Sherrerd	174
Goldman Sachs Asset	173
Brinson Partners	164
Discount Corp. of New York	139
Dreman Value	138
Bessemer Trust	137
RXR Group	136
Oppenheimer Capital	128
BEA Associates	126
John Hancock Financial	124
Lazard Freres Asset	119
Columbia Mgmt.	84
Harris Investment	80
PCM Int'l	80
GAMCO Investors	79
Burgess Capital	74
Bradford & Marzec	65
Marinvest	64
STW Fixed Income	60
TSA Capital	60
Dodge & Cox	46
Daniel Breen	31
Jennison Associates	24
McCowan Associates	23
Investment Index Tech.	16
Massachusetts Financial	12
Prudential Asia Fund	11
Boston Co.	**
Total	**112,341**

*As of Dec. 31
**Boston Co. manages $100,000.



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Plan health continues to be good

By Terry Williams

The nation's 50 largest corporate defined benefit plan sponsors maintained their funds' relative good health in 1989, according to *Pensions & Investments*' survey of annual reports.

A little more than 73% of the plans in *P&I*'s Corporate Top 50 — 46 plans out of a total of 63 — were fully funded in 1989, that is they had more assets than projected benefit obligations.

The survey covered the 50 companies with the largest amount of defined benefit assets, but included 63 plans because pension accounting rules require companies with more than one plan to list each separately where one fund is underfunded.

The average company in the Top 50 had $4.95 billion in accrued benefit obligations, $5.79 billion in projected benefit obligations and $7.1 billion in assets.

For the third year in a row, the top five plans with assets in excess of projected benefit obligations are sponsored by American Telephone & Telegraph Co., New York, reporting excess assets of $11.4 billion; General Electric Co., Stamford, Conn., $8.2 billion; IBM Corp., Stamford, Conn., $7.4 billion; E.I. du Pont de Nemours & Co., Wilmington, Del., $5.1 billion; and an overfunded plan of General Motors Corp., Detroit, $4.7 billion.

Plans whose PBO exceeded assets by the largest amounts include those sponsored by Chrysler Corp., Highland Park, Mich., reporting an underfunding of $2.74 billion; one plan of GM's, $1.87 billion; Bethlehem Steel Corp., Bethlehem, Pa., $1.17 billion; Westinghouse Electric Co., Pittsburgh, $62[illegible] million; and one plan of Ford Motor Co., Dearborn, Mich., $349 million.

The bull market of the last 10 years is responsible for the large percentage of pension funds being fully funded, according to Peter H. Roe, vice president with Reed Pension Consulting, Irving, Texas.

He warned the slowdown in the capital markets' rise and the growth in liabilities could result in underfunding in the future, particularly if a sponsor relies on unrealistic investment returns.

But he did not see any indication of that happening. Sponsors "are not kidding themselves about returns in this decade."

Interest rate and salary growth assumptions provide further insight into pension plan health.

David Kudish, managing director, Stratford Advisory Group, Chicago, said during the past five years, most corporate pension funds used an interest rate assumption of between 7% and 9% and a salary growth assumption of between 5.5% and 7.5%.

"From the statistics we have seen on performance, the range on investment returns has been between 15% and 20%," said Mr. Kudish. "Wage growth has been between 4% and 6%.

"You have favorable actuarial experiences on both of those key variables," Mr. Kudish said.

Projecting five years, Mr. Kudish forecasts a reduction in equity investments as more sponsors with overfunded plans seek to immunize pension liabilities using bond strategies

P&I Corporate Top 50

Company	ABO	PBO	Plan assets	Plan assets in excess of ABO	Plan assets in excess of PBO	Net periodic pension (expense) income	Pension expense as a % of adjusted net income	Plan assets as a % of corporate assets	ABO as a % of shareholders equity
Alcoa OP	2,713.6	2,873.8	2,890.8	177.2	17.0	(98.2)	9.4	25.0	51.5
Alcoa UP	30.4	38.9	0.5	−29.9	−38.4	n/a	n/a	0.0	0.6
Allied-Signal OP	2,453.0	2,835.0	3,345.0	892.0	510.0	(98.0)	11.4	33.0	71.9
Allied-Signal UP	1,409.0	1,499.0	1,303.0	−106.0	−196.0	n/a	n/a	12.9	41.3
Ameritech	7,151.3	8,020.0	12,151.4	5,000.1	4,131.4	(53.5)	4.1	61.3	93.0
Amoco	1,925.0	2,400.0	2,804.0	879.0	404.0	(29.0)	1.8	9.2	14.1
AT&T	21,395.0	21,988.0	33,397.0	12,002.0	11,409.0	318.0	NM	88.6	168.0
Atlantic Richfield OP	1,301.0	1,460.0	2,427.0	1,126.0	967.0	10.0	NM	10.9	19.8
Atlantic Richfield UP	157.0	172.0	11.0	−146.0	−161.0	n/a	n/a	0.0	2.4
Bell Atlantic	8,025.0	9,385.5	11,344.7	3,319.7	1,959.2	(140.6)	11.6	43.3	93.4
BellSouth	7,151.0	8,761.6	1,085.6	−6,065.4	2,086.0	(152.1)	8.0	3.6	54.6
Bethlehem Steel	4,159.6	4,453.5	3,281.0	−878.6	−1,172.5	(172.2)	41.2	68.4	207.7
Boeing	4,962.0	5,999.0	6,315.0	1,353.0	316.0	(230.0)	19.1	47.6	80.9
Caterpillar OP	1,875.0	2,303.0	2,873.0	998.0	570.0	(56.8)	10.3	26.3	41.9
Caterpillar UP	1,687.0	1,702.0	1,566.0	−121.0	−136.0	n/a	n/a	14.3	37.7
Chevron OP	2,975	3,406.0	4,612.0	1,637.0	906.0	81.0	NM	13.6	21.3
Chevron UP	157.0	169.0	3.0	−154.0	−166.0	n/a	n/a	0.0	1.1
Chrysler	7,793.0	7,832.0	5,087.0	−2,706.0	−2,745.0	(551.0)	60.5	10.0	107.7
Consolidated Edison	2,117.0	2,822.0	2,972.0	855.0	150.0	(66.3)	9.9	28.7	48.3
Deere OP	1,027.0	1,365.0	1,433.0	406.0	68.0	(51.0)	11.8	15.7	36.9
Deere UP	1,177.0	1,216.0	1,022.0	−155.0	−194.0	n/a	n/a	11.2	42.3
Delta Air Lines	2,410.6	3,487.8	3,175.0	764.4	−312.8	(160.0)	25.8	49	92.0
Dow Chemical	2,021.0	2,460.0	2,773.0	752.0	313.0	(94.0)	3.6	12.5	25.4
Du Pont	7,291.0	8,500.0	13,572.0	6,281.0	5,072.0	455.0	NM	39.1	46.2
Eastman Kodak	3,980.0	5,062.0	6,825.0	2,845.0	1,763.0	114.0	NM	28.9	59.9
Exxon	3,237.0	3,942.0	5,046.0	1,809.0	1,104.0	39.0	NM	6.1	10.7
Ford OP	7,081.4	8,009.0	11,037.6	3,956.2	3,028.6	(406.4)	9.6	6.9	31.2
Ford UP	7,551.1	7,612.7	7,263.6	−287.5	−349.0	n/a	n/a	4.5	33.2
General Dynamics OP	2,817.0	3,119.6	4,026.1	1,209.1	906.5	(74.5)	20.3	61.5	132.5
General Dynamics UP	2.8	2.8	2.7	−0.1	0.1	n/a	n/a	0.0	0.1
General Electric	14,940.0	16,057.0	24,211.0	9,271.0	8,154.0	241.0	NM	18.9	71.5
General Motors OP	14,915.2	16,468.8	21,166.0	6,250.8	4,697.2	(661.5)	13.5	21.9	42.6
General Motors UP	20,679.9	20,758.4	18,885.9	−1,794.0	−1,872.5	n/a	n/a	19.5	59.0
GM Hughes	2,897.8	3,235.8	4,501.8	1,604.0	1,266.0	112.9	NM	36.9	36.7
GTE	4,900.0	7,043.0	11,386.0	6,486.0	4,343.0	13.8	NM	35.6	58.3
IBM	11,708.0	15,451.0	22,867.0	11,159.0	7,416.0	154.0	NM	29.4	30.4
Lockheed	3,620.0	4,182.0	5,711.0	2,091.0	1,529.0	(12.0)	NM	84.1	175.6
McDonnell Douglas	3,290.0	3,848.0	5,887.0	2,597.0	2,039.0	95.0	NM	43.9	100.1
Metropolitan Life	1,113.0	n/a	1,605.0	492.0	n/a	(10.0)	NM	1.6	29.4
Minnesota Mining & Mfg.	1,965.0	2,449.0	2,533.0	568.0	84.0	(68.0)	5.2	25.9	38.5
Mobil	1,799.0	2,352.0	2,533.0	734.0	181.0	(54.0)	2.9	6.5	11.1
Monsanto	2,421.0	2,768.0	3,647.0	1,226.0	879.0	(1.0)	NM	42.4	91.4
Northrop OP	1,381.7	1,727.8	2,824.2	1,442.5	1,096.4	(9.5)	NM	86.4	157.9
Northrop UP	31.6	37.2	0.0	−31.6	−37.2	n/a	n/a	0.0	3.0
NYNEX	8,451.0	10,362.0	13,346.0	4,895.0	2,984.0	(50.0)	5.8	51.5	90.2
Pacific Gas & Electric	2,131.3	2,978.2	3,075.2	943.9	97.0	(104.0)	10.4	17.6	28.6
Pacific Telesis	6,540.0	7,276.0	10,512.0	3,972.0	3,236.0	(87.0)	6.5	49.6	82.9
Philip Morris	3,026.0	3,866.0	5,110.0	2,084.0	1,244.0	(33.0)	1.1	13.3	31.6
Prudential Insurance	2,776.0	3,226.0	4,816.0	2,040.0	1,590.0	157.0	NM	2.9	58.1
Rockwell Int'l	4,247.5	4,893.4	6,154.2	1,906.7	1,260.8	94.0	NM	66.8	108.8
Sears, Roebuck OP	3,558.0	4,566.0	5,460.0	1,902.0	894.0	(88.0)	5.5	6.3	26.1
Sears, Roebuck UP	34.0	45.0	2.0	−32.0	−43.0	n/a	n/a	0.0	0.2
Shell Oil	2,472.0	2,828.0	3,744.0	1,272.0	916.0	(44.0)	3.0	13.6	15.4
Southern Co.	1,065.0	1,631.0	2,347.0	1,282.0	482.0	(5.0)	0.6	11.7	15.5
Southwestern Bell	4,463.2	4,412.2	7,201.9	2,738.7	2,789.9	61.9	NM	34.0	55.3
Textron OP	1,481.6	1,709.7	2,206.4	724.8	496.7	(7.2)	2.7	16.0	58.2
Textron UP	329.2	337.4	250.3	−78.9	−87.1	n/a	n/a	1.8	12.9
Unisys OP	2,424.8	2,937.6	3,221.4	796.6	283.8	(55.8)	NM	30.0	62.5
Unisys UP	104.0	105.3	43.7	−60.3	−61.6	n/a	n/a	0.4	2.7
United Technologies OP	4,429.0	5,443.0	6,478.3	2,049.3	1,035.3	(5.7)	0.8	44.4	93.4
United Technologies UP	274.4	341.8	121.1	−153.3	−220.7	n/a	n/a	0.8	5.8
U S WEST	4,170.0	5,210.0	8,271.0	4,101.0	3,061.0	109.0	NM	32.5	51.7
USX	7,934.0	8,341.0	9,572.0	1,638.0	1,231.0	240.0	NM	54.7	138.3
Westinghouse Electric	4,640.0	5,074.0	4,454.0	−186.0	−620.0	(108.0)	10.5	21.9	105.8

Definitions:

ABO: Accumulated benefit obligation. The value of all benefits earned to date.

PBO: Projected benefit obligation. A measure of the liability for accumulated service reflecting future salary increases.

NM: Not material

OP: Overfunded plan

UP: Underfunded plan

Source: Companies' 1989 annual reports; all dollar figures are in millions

Getting a jump on stocks

Credit market offers insight into future equity activity

By William G. Shipman

Interest rates are primordial in understanding not only the volatility of both the U.S. economy but also the stock market.

During the summer of 1987, well before the crash, they indicated that during the next year the stock market was headed for deep trouble and investors would be well served to move into riskless assets. While their importance to economic vitality is widely accepted, the ability of the credit market to anticipate relative returns among, or within, asset classes largely has gone unnoticed.

Importantly for equity managers, interest rates' enviable and long lead-time forecasting capability is unbiased and readily available.

Interest rates' broad application to forecasting and asset strategy emanates from the role the rates play in the relationship between inflation and taxes. As inflation rises, so do tax rates; and interest rates are the market's best assessment of how much inflation is on the horizon.

The economy's response to a change in tax rates follows a systematic pattern. An anticipated tax hike brings forward taxable activity to the present. Symmetrically, lower prospective taxes retard commerce in the near term.

A projected tax rate increase (decrease), therefore, is associated with stronger (weaker) growth this year and a drop (rise) in output later. Interest rates forecast this volatility with upward of a two-year lead time.

The stock market also foretells ups and downs in the economy, but its lead time is shorter. This lead-time differential, or market inefficiency, is key to the ability of the credit market to anticipate equity trends.

As an empirical matter, stock prices are related to both current and historical interest rates. Estimating the outlook for the equity market requires, in part, knowledge of probable future interest rates. As illustrated in Exhibit 1, spot Treasury bill prices have an impressive record at getting a fix on this important variable.

The mean basis point difference, or error is 61. The T-bill futures market also forecasts interest rates. Its error for the same interval is 74 basis points, and the standard deviation is almost twice as high.

The Standard & Poor's 500 Stock Index, as well as the 80 or so industries that comprise it, are interest-rate sensitive. This may be common knowledge for sectors such as housing and autos, but what generally is not appreciated is the differing and significant statistical relationships between the credit market and the remaining groups.

This allows for modeling of the stock market. The architecture is the linkage between the interest rate set and the relative return of the composite to each of its industries. Standard statistical techniques are used to estimate the probability that each industry will outperform the market during the following 12 months. Probabilities are ranked in descending order from high probability industries, or HPIs, to low probability industries, LPIs.

A number of asset management styles can exploit this quantitative approach.

For example, an active equity strategy would invest in the eight to 16 S&P industries ranked at the top of the list: those with the greatest chance of outperforming the market during the next year. Historical simulations suggest investing in this range of groups earns returns well in excess of the S&P. Including more HPIs begins to lower the results toward that of an index fund. Stock selection is limited to the companies S&P includes in its industry sectors. Each security position is weighted by market capitalization.

Tactical asset allocation is easily accomplished by adding T-bills as an asset class to the above strategy. In this approach, the first step is estimating the probability that the composite will return more than a riskless asset over one year. This is achieved by regressing the differential in the historical total return of the S&P 500 vs. T-bills on the interest rate set. If the probability of a higher equity return is sufficient, assets are invested in the portfolio described above. If it is not, they are deployed in short-term paper.

For the above strategies, probabilities are re-estimated each month for the market vs. T-bills and for each industry vs. the market. This continuous flow of new information guides rebalancing.

The last style, long/short, leverages both of the foregoing. If bullish on the market, buy the HPIs. If bearish, then short the eight to 16 industries that are most likely to underperform the market.

While historical results are no guarantee of the future, characteristics of the strategies, shown in Exhibit 2, are intriguing.

Volatility relative to return (coefficient of variation) is less than that of the market for all three portfolios. The standard deviation of returns for each style can be reduced to below that of the S&P, while still maintaining higher relative performance, by introducing a non-volatile asset such as short Treasuries. Risk/return preference determines their appropriate weighting.

This quantitative approach to investment strategy offers many advantages.

The input variable, T-bill rates, is a market price that, at the margin, incorporates investors' latest known information.

Also, the U.S. government debt market is broad-based, liquid and reflective of global concerns. These include inflation, changing marginal tax rates, currency risk, the budget deficit, and the real rate of interest.

In addition, the equity strategy can be used effectively in conjunction with passive management by tilting an index fund toward high probability industries or away from LPIs. ■

Exhibit 1

The predictive ability of T-bills

Year	Average T-bill yield	Spot price at end of previous year	Difference
1989	8.11	8.10	0.01
1988	6.67	5.68	0.99
1987	5.78	5.67	0.11
1986	5.97	7.05	1.08
1985	7.47	7.85	0.38
1984	9.54	8.97	0.57
1983	8.62	7.92	0.70
1982	10.60	11.08	0.48
1981	14.04	14.30	0.26
1980	11.46	12.04	0.58
1979	10.05	9.26	0.79
1978	7.18	6.13	1.05
1977	5.26	4.34	0.92

Exhibit 2

Risk/return characteristics of three portfolio styles

Historical simulations 1980 - 1989

	Active equity	TAA	Long/ short	S&P
Annualized return (%)*	21.94	24.88	27.83	13.40
Standard Deviation	16.49	15.01	26.53	13.05
Coefficient of variation (%)	75.16	60.33	95.33	97.39
Alpha	10.10	21.03	27.81	NA
Beta	0.91	0.33	0.15	NA

*Returns for 1980 - '87, except for long/short strategy, are appreciation only. Fees and transaction costs have not been deducted.

Mr. Shipman is managing director of BRS Capital Management Inc., a Boston-based investment management firm.

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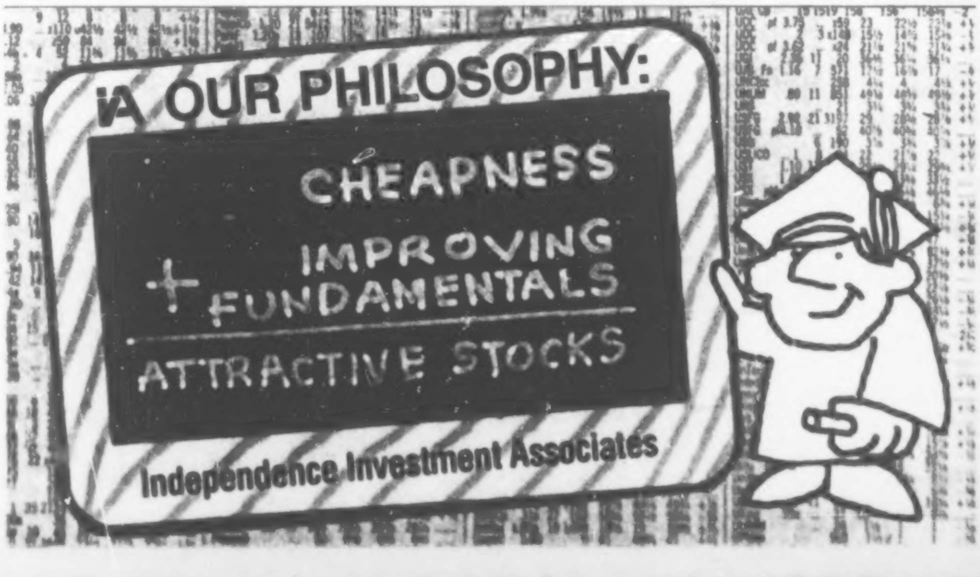

Transfer

Continued from page 1

While the revenue lost as a result of the tax "would be an expensive $600,000," Mr. Grant said, one reason corporations are reluctant to oppose a securities transfer tax is that this type of indirect tax would allow plan sponsors more investment flexibility than a direct tax on corporate or pension fund earnings.

"Everybody is resigned to the fact that some increase in taxes is inevitable," Mr. Grant said. "This (tax) may be viewed as a less onerous way of raising tax revenue."

Officials of public funds, which generally are less well funded than corporate ones and would feel the impact of revenue loss sooner, vigorously oppose the tax.

The tax would slash investment revenue, and ultimately would force public employers to increase taxes to honor guaranteed benefits, and possibly force some actively managed funds to adopt passive strategies, California Teachers' Mr. Mosman said during a press briefing for the Council of Institutional Investors.

"Any time you start mitigating an investment return, ultimately it is going to result in an increased cost for the taxpayer," he said.

According to estimates, the $31 billion California Teachers' plan would have to pay a $9.5 million annual tax on security sales of $1.9 billion. The cost to the fund, which is 80% indexed, would be 3 basis points and would increase administrative costs by 66%, Mr. Mosman said.

That's minor compared to the 71 basis points the Los Angeles County Employees' Retirement Association would have to pay, Mr. Mosman commented. The L.A. County fund, which has $9.3 billion in assets, of which all but $450,000 is actively managed, has estimated its costs to be $64.7 million on sales of $12.9 billion.

If such a tax were imposed, benefits could be jeopardized, Diane Sandoval, manager of L.A. County's retirement accounting division, said in an interview.

"The more expenses you have, the less growth you have, the less benefits you provide," Ms. Sandoval explained. Plus, "the entire strategy of the plan would have to be visited. And the consultant along with the board would have to take a hard look at passive management."

Cathie Eitelberg, director of the pension and benefits program at the Government Finance Officers Association, Washington, agreed: "I think a lot of plans will look at passive investing because of the hit they might be taking.

"An aggressively managed plan typically will have more transactions than does a passively managed plan. There's a double whammy there. You get hit with fees and you get hit with a tax."

While the tax is only one of many revenue raisers under consideration, it already has attracted widespread opposition from Wall Street and from organizations in the investment community.

Because the tax has yet to be proposed, it remains unclear as to what instruments the tax ultimately would affect and whether rates would differ among security types.

Still, Donald Kiefer, senior specialist in economic policy with the Congressional Research Service, Library of Congress, estimated the tax would decrease the volume of trading by 8.1% and decrease the value of the market by 7.9%, or take 236 points off the Dow Jones Industrial Average.

While the tax is expected to reduce liquidity and market efficiency, proponents have argued it also would reduce short-term speculative trading.

Wyatt's Mr. Schneider noted the amount of revenue plans would lose to the tax would vary depending on turnover and other factors.

Nevertheless, he said, "I don't see corporations running for the hills saying 'They're taxing us half a percent,'" he said.

One indicator of corporate pension funds' reluctance to oppose the tax was the absence of some corporate industry groups from a July 16 letter opposing the tax sent to John H. Sununu, chief of staff to the president.

The letter was signed by 26 business and financial organizations, but didn't include the Financial Executives Institute, the ERISA Industry Committee and

the Business Roundtable. The
sociation of Private Pension
Welfare Plans, the Governm
Finance Officers Association
the National Association of S
Retirement Administrators w
signees.

Spokesmen for the FEI
ERIC said their members are c
cerned, but they're waiting for
total tax proposal.

The bottom line on a transactions tax

(Tax in parentheses)

The five funds on the chart are the largest public pension funds in California. They represent a combined membership of nearly 1.5 million active and retired participants and have combined assets exceeding $100 billion. The costs were figured using 1988-'89 security transactions and assuming a 50-basis point tax.

California Public Employees'
Sales: $7,774 million ($38,856,480)
Purchases: $18,032 million ($90,162,486)

California State Teachers'
Sales: $1,919 million ($9,455,000)
Purchases: $22,773 million ($113,865,000)

Los Angeles County Employees'
Sales: $12,937 million ($64,688,932)
Purchases: $13,440 million ($67,204,140)

San Francisco City & County Employees'
Sales: $3,336 million ($16,680,000)
Purchases: $4,179 million ($20,900,000)

Los Angeles City Employees'
Sales: $910 million ($4,550,000)
Purchases: unavailable (NA)

All Systems
Total sales: $26,876 million ($134,230,412)
Total purchases: $58,424 million ($292,131,626)

Source: California State Teachers' Retirement System, Sacramento

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States

Continued from page 1

said. "I'm not sure there is a right or wrong."

Gary Pines, vice president of Towers Perrin, Chicago, said there is a wide range of acceptable assumptions. Rate of return assumptions, he said, were commonly 4% or 5% in the 1970s, but the bull market made higher ones widespread.

Often, a change in the assumed rate of return on assets makes a contribution cut possible, although some states have raised this assumption without cutting funding. Instead, the higher return rate allowed them to increase benefits or just to recognize their good investment experience.

Other actuarial changes also can produce reduced contributions. In California, Gov. George Deukmejian has proposed the $58 billion California Public Employees' Retirement System change the way it accounts for actuarial gains or losses related to the retiree death rate. Instead of recognizing these gains or losses over the system's full funding period — 26 years — it would recognize them over five years, said Dale Hanson, chief executive officer of the fund.

The system's staff already had suggested such a change, which would save $250 million in contributions for the fiscal year that began July 1, but trustees have not voted on it yet, Mr. Hanson said. He expressed surprise the governor would propose legislation on a change that has not yet received board approval.

In New York, funding formula changes legislated earlier this year will save the state about $385 million in contributions to the $28.1 billion New York State Teachers' Retirement System and between $306 million and $444 million in contributions to the $44.2 billion New York State & Local Retirement Systems (*Pensions & Investments*, June 11).

The assumed rate of return on investment for the State of Connecticut Trust Funds has been raised to 9% from 8.5% for the 1990-'91 fiscal year that began July 1, said Frank McDermott, assistant treasurer-investments. It's as yet unknown how much this will reduce contributions, but it is part of the state's attempt to balance its budget, he said.

In Arizona, the change in actuarial methods and other factors, including benefit increases and a contribution shortfall in the previous year, will make the 1990-'91 employer contribution 3.82% of the $3 billion payroll for employees covered by the retirement system, Mr. Gallison said. In the 1989-'90 fiscal year, under the previous methodology, the contribution should have been 4.69% of payroll, but the Legislature set it at 2% because of a budget squeeze. Employees make an equivalent contribution.

The actuarial change alone would have reduced the contribution rate by 1.67 percentage points, Mr. Gallison said. This works out to a roughly $50 million saving.

In 1989, the Minnesota Legislature upped the rate of return assumption for the $2.1 billion Minnesota State Retirement System to 8.5% from 8% but also raised the salary increase assumption to 6.5% from 6%, largely to provide improved benefits.

These changes made employer contributions rise to 4.51% of payroll in 1989 from 3.73% in 1988; this year, however, they were scaled back to 4.29% of the $1.5 billion payroll for covered employees, about a $3.3 million difference, said Paul Groschen, executive director of the state fund. The 1989 figure had been higher than necessary, but it wouldn't have been scrutinized had the state not been in a budget crunch, he said.

At the behest of the state Legislature, the Rhode Island Retirement Systems reviewed actuarial assumptions earlier this year and raised the rate of return assumption to 8% from 7.5%. This change is expected to save $12 million in contributions for the 1990-'91 fiscal year.

The $700 million Vermont State Employees' and State Teachers' Retirement Systems raised their rate of return assumption to 8.5% from 8% for the fiscal year that began July 1, 1989, and the state saved roughly $3 million in contributions that year. The state Legislature had suggested the change, but the systems' actuaries had no problem with it, said George Bruce, director of retirement and investment services.

The $2.25 billion Louisiana State Employees' Retirement System raised its rate of return assumption to 8.25% from 7.5% earlier this year. It was scheduled to review the assumptions this fall, but was asked to move up the process because of the state's financial problems, said Thomas D. Burbank Jr., executive director.

He emphasized, however, the change in the rate was actuarially justified and not just a means to help out the state. The change reflects the diversification of the system's asset allocation in recent years that likely will produce better performance. For instance, the

system's maximum allowable
uity allocation has moved to 5
from 35% in the past two years.
said.

The assumption change will
duce state contributions $24 m
lion this year; a carryover fro
prepayment adds a $20 mill
reduction.

The board of the $1.65 bill
Missouri State Employees' Reti
ment System has voted to cha
its rate of return assumption
8.5% from 8%, a move that is
pected to drop contributions
9.7% from 11.5% of the $900 m
lion payroll, a saving of about
million, effective July 1, 1991.

Some states have cut contri
tions without changing actua
assumptions. "The business ab
adjusting assumptions is a jok
said Mike Mory, executive se
tary of the Illinois State Empl
ees', Judges' and General Asse
bly Retirement Systems.

In Illinois for the past seve
years, Gov. James Thompson
the state Legislature simply h
allocated less than the actuari
required appropriation to sta
funded pension systems.

For instance, the allocation
state-funded retirement syste
this year is $475 million. $
million less than actuarially
quired, said Jim Ofcarcik, m
ager of long-term debt analy
for the Illinois Economic and
cal Commission. "You don't h
to change assumptions if you h
control of the appropriation p
cess," Mr. Ofcarcik said.

Ryan Financial starts investment fir

WILMETTE, Ill. — Ryan Financial Advisors Ltd. has started an institutional money management arm, Paragon Asset Management.

Paragon is an asset allocator, mapping out a long-term strategic allocation and making shorter-term, tactical moves as well, s
Mike Ryan, president of b
firms.

The firm targets small pens
plans as its primary clients, wit
typical account being $5 mill
or less.

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August 6, 1990

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AT DEADLINE

Nevada boosts commitment

The Nevada Public Employees' letirement System has ontributed another $31 million o Core Group Trust for real state investments by four public unds including Nevada. The ssets will be invested in an Arlington, Va., retail property.

California OKs investment

California Public Employees' Retirement System trustees pproved investment in index participation notes, an alternative o international indexing funds. No investment has been made yet.

Oppenheimer to be acquired

Oppenheimer Management will e acquired for $150 million by enior management and Massachusetts Mutual Life nsurance Co. from British & Commonwealth Holdings PLC. Oppenheimer, one of the largest J.S. mutual fund companies with nore than $14 billion, will ontinue to operate independently nd retain its key management.

Jnion approves ADRs

The $780 million Graphic Communications Supplemental Retirement and Disability Fund as decided to invest in American epository receipts and has upped s allocation to guaranteed nvestment contracts.

The investments will be made s part of a $162 million balanced ortfolio now managed by Lazard reres Asset Management, which vill have discretion over the mount invested in ADRs.

The fund also gave an dditional $14 million to T. Rowe rice Guaranteed Asset Advisers nc., bringing the total value of he GIC portfolio to $50 million.

ustody operations melded

The $52 billion global custody nd master trust operation of larris Trust & Savings has been nerged with its parent, Bank of Montreal. The Bank of Montreal lobal Custody will service more han $12 billion in international ssets and $175 billion from orth America. The merger ollows the departures of Gary othman, manager of master rust, and Richard Caldwell, head f the trust department.

Villens quits Shearson

Robert Willens, a tax and ccounting senior vice president Shearson Lehman Hutton Inc., as rejoined KPMG Peat Marwick a partner in charge of rofessional services. He left Peat Marwick for Shearson in 1987.

IAA buys jeweler's debt

CJC Holdings, a jewelry anufacturer, privately placed 5 million of new subordinated bt with Teachers Insurance & nnuity Association as part of a 65 million recapitalization and financing of debt associated th the company's 1988 veraged buy-out.

Photo by Rick Dole

The Inverrary Hotel is the biggest real estate problem of the Operating Engineers Local 675 pension fund.

Union's investments spark DOL lawsuit

By Joel Chernoff

Trustees of a South Florida multiemployer pension fund have invested 95% of plan assets in highly leveraged and poor performing real estate concentrated in one county, the Department of Labor alleges in a lawsuit.

The case, involving the Operating Engineers Local 675 pension and health and welfare funds in Pompano Beach, Fla., marks an important step in the department's campaign against social investing by union pension funds. By investing in union-only real estate projects, building and construction trade funds have created jobs for their members.

What's more, the litigation represents the department's second attempt to clamp down on the social investing activities of the Operating Engineers fund, whose board of trustees is chaired by Dennis Walton, an outspoken advocate of job-creating investments by union funds.

The Labor Department lost a major lawsuit against the fund's trustees for allegedly improper social investing practices in the mid-1980s.

The department has charged the pension fund has concentrated 95% of its $62 million in assets in risky real estate ventures in Broward County, home of the union local, in violation of the

See **Union** *on page 27*

Liquidity crunch hits realty funds

Participants withdraw $1.9 billion

By Steve Hemmerick

Institutional investors want to withdraw more than $1.9 billion from open-end commingled real estate funds.

Some withdrawal requests are mounting amid fears the appraised values of commingled fund properties are inflated. Some pension fund executives and trustees believe if they exit the commingled funds quickly enough, they will get out before any more writedowns deflate the appraised values.

Other reasons some investors are leaving open-end funds are to move to direct real estate investing or to reduce their funds' allocation to real estate.

But many investors will have to wait for about a year to get their money — about four times longer than expected — because the money managers sponsoring the funds have little cash on hand to meet the withdrawal requests.

Among the funds facing withdrawal requests are Aetna Capital Management's $1.6 billion Real Estate Separate Account; Phoenix Mutual Life's $350 million Real Estate Separate Account; Sentinel Real Estate Corp.'s $850 million SRE Real Estate Fund; Copley Real Estate Advisors' $1.2 billion Developmental Properties Account; Bank of Boston's $213 million Pooled Real Estate Investment Fund; and First Wachovia Corp.'s Real Estate Fund.

In fact, heavy withdrawal requests sparked the liquidation of at least two insurance company commingled realty funds.

John Hancock's Equity Real Estate Account, which had about $600 million in assets in 1987, is down to about $35 million, according to Kevin McGuire, president of John Hancock Properties Inc., Boston.

Considering the state of the real estate market, Mr. McGuire said he is pleased about the sell-off, adding the firm was able to get good prices for the properties.

Travelers Corp.'s Separate Account R also is in liquidation proceedings, which were announced last January, said Mark Robinson, a spokesman for Travelers. There are 146 institutional investors in Separate Account R.

Some managers are slowing the process by refusing to sell properties at bargain-basement prices in a buyers' market. Others are switching to pro-rata, instead of first-come first-served, systems for meeting withdrawal requests.

Selling at fire-sale prices would hurt investors who remain in the open-end funds, notes Nori Gerardo, a consultant with Pension Consulting Alliance, Glendale, Calif.

Indeed, real estate money managers are grappling with two problems: balancing the interests of clients who remain with those

See **Withdrawals** *on page 30*

U.K. firm extends rights to U.S. investors

By Marcia Parker

Now that Britain's Attwoods Group has succeeded in breaking the barriers that once left U.S. shareholders short on rights offerings, more foreign companies are expected to follow suit.

U.S. institutional investors welcome the move, saying it will put them on a more level playing field with their overseas counterparts. They say it also provides another opportunity to boost their international equity investments when they opt to exercise their rights.

Rights issues give existing shareholders the opportunity to buy new shares at a rate that can sometimes be 50% below the market price. It is a traditional way for mainly West German and British companies to raise capital for expansion and other purposes. The offerings must be approved by shareholders.

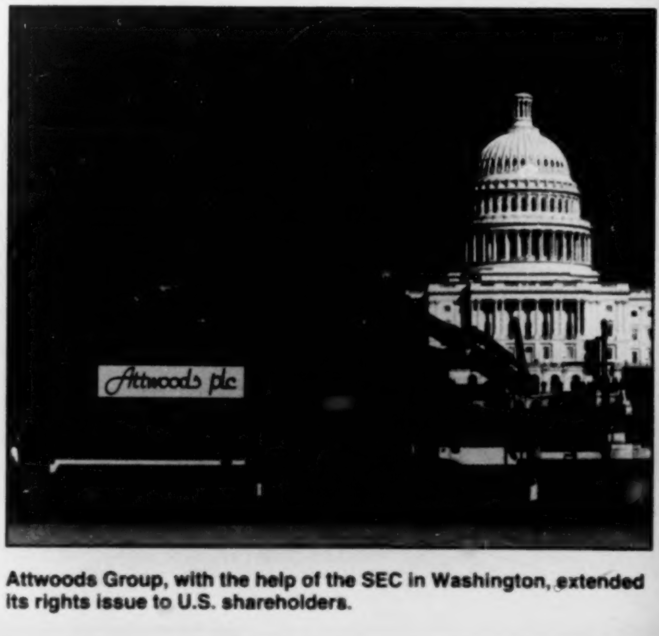
U.S. corporations seldom, if ever, use rights offerings.

In the past, regulatory, time and other constraints made it nearly impossible for foreign companies' U.S. shareholders to take part in the offerings. Instead, rights attributed to U.S. shareholders, including holders of American depository receipts, were sold abroad and the shareholders were cashed out. They didn't get the chance to buy the new shares, and sometimes lost money in the process because the cash wasn't always thought to be equal in value to the securities offered in the rights issue.

No one knows how many U.S. shareholders got left behind through the years, but there have been enough to warrant special handling of the Attwoods Group offering by the Securities and Exchange Commission.

U.S. institutions can own foreign shares by buying ordinary or preference shares or ADRs, which represent a share of stock in a foreign company. There are hundreds of foreign companies whose ordinary or preference shares are

See **Rights** *on page 30*



Attwoods Group, with the help of the SEC in Washington, extended its rights issue to U.S. shareholders.

NEWS DIGEST

Xilinx, maker of these electronic parts and other specialty semiconductors, is one of 31 venture capital-backed companies to go public this year in the rebounding IPO arena. Page 27.

The Milwaukee County Employees' Retirement System is under investigation for its relationship with Prudential-Bache Securities. Page 4.

Philadelphia Municipal Pension Fund's investment officer has withstood a legal challenge. Page 6.

The high-yield bond market is only temporarily in the doldrums and should rebound during the '90s. Page 24.

SPECIAL REPORT: COMPUTERS

Specialized software has rooted itself in the money management industry as an indispensable tool for both managers and pension fund executives. Page 17.

FINANCING

Attwoods Group's rights offering may spur other firms to include U.S. shareholders in future issues. Page 1.

TIAA's loan to Nestor-BNA underscores the growing global tilt of the private market. Page 2.

INTERNATIONAL

The specter of 1997 has Hong Kong businesses trying to safeguard pension assets. Page 3

Pension executives use passive currency hedges more often than active strategies. Page 3.

REAL ESTATE

Withdrawal requests exceeding $1.9 billion have managers of open-end funds in a liquidity crunch. Page 1.

The Department of Labor is suing a South Florida union fund over its real estate investments. Page 1.

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Survey questionnaires in the mail

***Pensions & Investments*' annual directory of master trust/custody and global custody banks, and biennial survey of pension executives and money managers on their satisfaction with master trust services, are under way. Questionnaires were mailed July 24 and are due Aug. 27. If your organization has not received a questionnaire or if you have a question about the surveys please contact Christine Philip, directory coordinator, at (312) 649-5217.**

SEC puts brokers on alert

Agency rules some soft-dollar trades are not protected

By Joel Chernoff

WASHINGTON — The Securities and Exchange Commission has sent a chill through the soft-dollar brokerage community, but it remains to be seen whether the industry will catch a cold.

The SEC effectively stopped many trades directed by money managers when it said soft-dollar-generating trades in which a broker uses its own capital do not receive special protection under securities law.

In particular, the ruling affects trades involving bonds and over-the-counter stocks. The SEC also clarified the protection does not apply to trades involving financial futures.

Between $35 million and $45 million in soft dollars were generated in 1989 from secondary-market bond trades, said Woody Canaday, principal with Greenwich Associates, Greenwich, Conn. (An additional $110 million in soft dollars are attributable to new bond issues, which are not affected by the SEC ruling.)

The National Association of Securities Dealers Inc., Washington, said $90.5 million in soft dollars were generated between July 1, 1988, and March 31, 1989, said Gene Finn, chief economist. More recent data were not available. The amount of soft dollars generated from financial futures trades is believed go be small, although no data were available.

The final word on soft dollars, however, has not been uttered. SEC officials promise to revisit the broader soft-dollar arena shortly, possibly as soon as this fall.

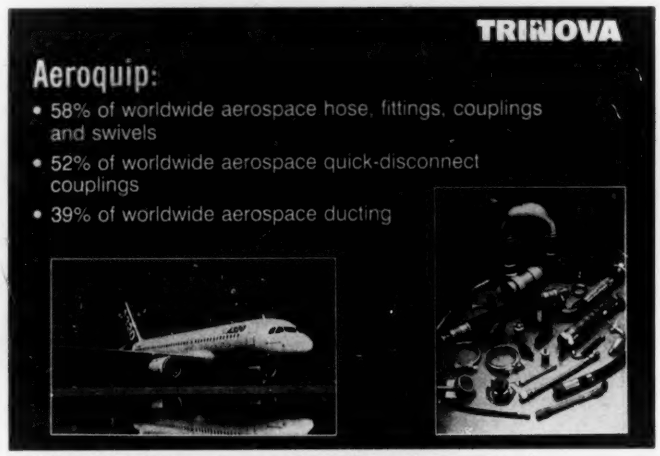
Major Wall Street firms have charged the growing use of soft dollars on the equity side has taken profitable, easy trades away from traditional brokerage houses, making them reluctant to position trades. This reluctance increases overall market volatility and decreases liquidity for stocks, they argue, although soft-dollar brokers dispute those claims.

The SEC's July 25 action, however, means a money manager cannot hide behind a securities law exemption, known as section 28(e) for the provision in the 1934 Securities Exchange Act, if the manager receives soft-dollar services for principal transactions.

Section 28(e) permits money managers to pay more than the lowest available commission on a trade if a soft-dollar credit is used to pay for investment research. But the SEC clarified the provision applies only to agency trades, in which a commission is charged, and not to principal trades, where the dealer gains a profit from the spread.

While principal trades will not automatically violate the 1974 Employee Retirement Income Security Act, Labor Department of-

See **Brokers** *on page 31*



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TRINOVA is linking retirement benefits to the company's profitability through defined contribution plans.

TRINOVA switches emphasis to 401(k)s

By Leonard J. Hollie and Marcia Parker

MAUMEE, Ohio — TRINOVA Corp. is switching to a defined contribution fund strategy from a defined benefit one.

Company officials have launched six new defined contribution plans. In the process, they cut to 16 from 40 the number of employee benefit plans offered.

Down the road, the company also might start defined contribution plans for overseas employees, according to William Rose, director of retirement assets.

"We have six defined contribution plans and 10 defined benefit plans left," said Mr. Rose. "We are consolidating the plans, and the administration is simplifying as we move toward a defined contribution environment. We are putting our emphasis on defined contribution plans."

Its six defined contribution plans have $334.8 million in assets; the remaining 10 defined benefit plans have $61.7 million in assets.

"We think a defined contribution plan makes a lot more sense in today's world," said Mr. Rose. "Employees have more control over their retirement income, and their financial well-being is tied to the success of the company."

Mr. Rose said TRINOVA opted for a 401(k) as an employee incentive rather than an employee stock ownership plan because employees would have more investment options and tax incentives to save money.

"The 401(k) is a very nice vehicle to do that. It's an excellent tax shelter for employees who would otherwise not have one," Mr. Rose said.

The six 401(k) plans have four options: a guaranteed fund that uses both guaranteed investment contracts and bank investment contracts; a balanced fund; an equity index fund; and a company stock option.

No money managers were terminated as a result of the shift to defined contribution plans, Mr. Rose said. TRINOVA has eight managers, four for the defined contribution plans and four for the defined benefit plans. He said new managers may be hired if

See **401(k)** *on page 30*

TIAA deal sets private market pace

By Marcia Parker

The Teachers Insurance and Annuity Association was the sole provider of the debt financing for a U.S. acquisition by a British company.

TIAA provided $17 million to help Nestor-BNA PLC, Britain's largest nursing agency, finance its $40.8 million acquisition of MRA Staffing Systems Inc., a Fort Lauderdale, Fla., supplier to hospitals of temporary nurses and other health-care personnel.

While TIAA's investment is small, it is another sign the private placement market is becoming more international. TIAA and other U.S. investors report a surge of non-U.S. issuers seeking to raise capital privately in America.

"The private market is looking for product; we can't always get what we need domestically," said David Bullet, TIAA senior vice president. "We're seeing more deal flow from Europe and other countries."

For Nestor-BNA, the deal represents the company's first exposure to U.S. institutional investors and the U.S. private placement market. The company got cheap financing for its U.S. operations and an introduction to a major private placement investor.

In the deal, TIAA purchased dollar-denominated guaranteed senior secured notes due 1997. The equity financing was in the form of a 1-for-3 rights issue of 18 million new shares to Nestor-BNA's U.K. shareholders. The rights issue, which had to be approved by shareholders, was well received.

"It was our first acquisition in the U.S. and a relatively large acquisition for us," said Mike Rogers, Nestor-BNA's chief executive.

Although the paper work was arduous, Mr. Rogers said the private placement went smoothly

See **Private** *on page 28*

Funds take steps to protect assets

Hong Kong firms leery of '97

By Margaret Price

As a prelude to 1997, an increasing number of large Hong Kong companies are seeking stepped up protection of their retirement assets on the chance of a future governmental grasp.

Among the safeguards are the use of an offshore trustee and currency protection.

Such moves are in preparation of China's regaining control of Hong Kong in 1997. Last year's Tienanmen Square massacre in Beijing heightened concern among many Hong Kong employees that, at the very worst, the Chinese government might someday appropriate these assets; or, if the Hong Kong dollar plunged amid a political emergency, the value of pension assets would tumble.

While many Hong Kong business executives downplay the likelihood of such crises publicly, more companies are setting up pension safeguards.

The Beijing tragedy "hit home to a lot of Hong Kong employees that they might not get their retirement benefits or that they might be worthless at some point," said Grahame Stott, actuary with Wyatt Co. (H.K.) Ltd., Hong Kong. Since June of last year, "there has been a lot of focus on safeguarding these benefits."

The new methods have little to do with the investment of Hong Kong's approximately $10 billion (U.S.) in Hong Kong pension assets. Already, some 70% of these are in non-Hong Kong-dollar investments, largely for reasons unrelated to 1997.

Instead, companies are focusing on who has the legal title to the assets — with a preference increasing for having an offshore trustee that is outside of Hong Kong's legal jurisdiction.

A common practice has been to use a trustee located in Hong Kong. The pension fund might also have within the trust documents an emergency clause, designating an offshore trustee that would take control of a plan's assets in case of an emergency in Hong Kong.

Other, perceived safer, options have been gaining popularity. These include the use of an alternative trustee who already acts as custodian, but whose authority as trustee doesn't take effect unless a perceived emergency occurred in Hong Kong; and an offshore trustee, who serves as custodian and trustee, overseeing the plan's administration and investments.

Mr. Stott estimates about $3

See **China** *on page 28*

Photo by Margaret Price

Uneasiness about Hong Kong's future has some companies trying to safeguard their pension assets.

Indexing climbs 31% in year

International, especially fixed income, fuels the growth

By Leonard J. Hollie

International indexing surged for the year ended May 31, while domestic index funds advanced steadily.

Investors' search for global investment opportunities pushed international stock and fixed-income indexed assets up 54.3% and 539.3%, respectively, during the 12 months. Adjusted for market growth, the funds showed strong advances of 50.1% and 496.2%.

Domestic equity funds rose 27.8% in the year, 9.7% when adjusted for the market, and fixed-income funds rose 36.1%, 24.5% on a market-adjusted basis.

Index managers say international indexing has experienced tremendous growth mainly because it is a way to reduce risk and is less expensive than traditional international management.

"Our clients are aware that international investments limit risk and we are able to reduce risk through currency hedging," said Kevin Clark, vice president for Chase Investors Management Corp., New York. The firm has $4.2 billion in indexing, with $1.3 billion in international accounts.

Gus Sauter, vice president of core management for The Vanguard Group of Investment Cos., Valley Forge, Pa., said international indexing is popular with investors because "it counteracts the two most expensive features in international investing: transaction costs and management fees." Vanguard manages $3.096 billion in index funds, with $12 million in international equities.

As of May 31, leading index managers surveyed by *Pensions & Investments* reported $276.681 billion in indexed assets, an increase of 5.6% since Nov. 30 and 31.3% from a year earlier.

Of the total, $22.66 billion — 8% — was in international assets. As has been the case for several years, international equity funds accounted for most of those assets, but fixed-income funds are showing impressive growth. The managers reported $21.554 billion in international equity index funds, up from $21.196 billion in November and $13.965 billion a year ago. The $1.106 billion in international fixed-income, however, is up from $667 million as of Nov. 30 and $173 million the previous year.

The Morgan Stanley Capital International Europe Australia Far East Index returned −7.83% for the six-month period and 2.8% for the year. The Salomon Brothers World Government Bond Index returned 0.31% during the six months and 7.21% for the year.

David Edington, vice president at Pacific Investment Management Co., Newport Beach, Calif., said his clients want to increase their overseas investments because they see a lot of opportunity for growth in Eastern Europe and think a few countries there might provide good returns.

"The U.S. no longer has the lion's share of equity capital, and people want to increase the diversification of their portfolios," said Mr. Edington, whose firm manages $3.95 billion in index funds.

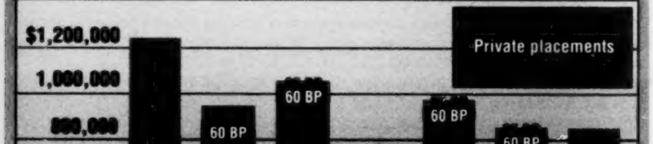
Not all managers, however, are sold on the virtues of international fund indexation.

See **Indexing** *on page 29*

Corrected chart for D.C. Retirement Board fees

A chart detailing fee negotiations between the District of Columbia Retirement Board and Alex. Brown Real Estate Advisors, Baltimore concerning a $100 million real estate account was produced incorrectly in the July 23 issue, and should not have been attributed to Alex. Brown.

The correct chart, which was presented to the D.C. Board at a May 29 meeting by officials from Alex. Brown is reproduced below. The fee for the JMB Group Trust I, a closed-end pooled fund in which the D.C. fund already was invested, is intended to present a benchmark; JMB was not competing for the contract.



Passive currency strategies draw increasing interest

By Margaret Price

With controversy still surrounding active currency management, more pension funds are using passive hedging than active strategies to protect foreign investments from currency ravages.

Active currency management has failed to win many pension fund clients so far, in part because of fears it might not add value.

"I haven't seen a track record that has consistently added value," said Sunny Oberoi, director-investments and benefit finance for the $3.1 billion fund of Pacific Gas & Electric Co., San Francisco, echoing an oft-heard theme. Since January, his fund has been using passive hedging — where foreign exposure remains hedged at all times — for 80% of the fund's approximately $400 million in foreign investments.

According to Wilshire Associates, Santa Monica, Calif., about $3 billion of U.S. pension funds' approximately $83 billion in international assets are managed by "currency overlay" managers who actively handle all or parts of clients' currency exposure. Experts also estimate pension funds use passive hedging on at least $5 billion of foreign assets. "Dynamic hedging," a form of portfolio insurance against currency's ill effects, is used on about $1 billion of international assets.

Users consider passive management — where currency hedges are imposed and left on — to be a shield against currencies' gyrations. Passive hedging relieves investors from the task of determining currencies' paths — a judgment many investors say they can't make consistently.

Richard McGahan, director-pensions for the $10.5 billion fund of Pacific Telesis Group, San Francisco, said his fund started passively managing an undisclosed amount of currencies in-house almost 1½ years ago. The fund, which uses currency futures for its hedging program, "had no idea which way the dollar was going."

He said the fund had netted a "large gain," in part from the dollar's previous fall, that the fund wanted to lock in.

At least temporarily, PacTel officials have ruled out use of currency overlay. Mr. McGahan said "we don't know if it's possible to

See **Currency** *on page 31*

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Consulting dispute leads to investigation

By Curtis Vosti

MILWAUKEE — The county prosecutor's office is investigating the recently ended 14-year relationship between Prudential-Bache Securities Inc. and the $750 million Milwaukee County Employees' Retirement System.

The white-collar crime unit of the Milwaukee County District Attorney's office has requested and received background information not included in the so-called Payne Report on the county's investment practices, according to Barbara Horton, secretary of the County Retirement Board.

Karen Christianson, an assistant district attorney in charge of the investigation, declined comment.

The report, issued in November, recommended the board end its ties with Pru-Bache because of the board's lack of knowledge of payments made to Pru-Bache consultant Gene Gilbert by investment management firms the board hired on Mr. Gilbert's recommendation.

The report, authored by former Wisconsin Securities Commissioner Ulice Payne Jr., also criticized the board for not knowing how much it paid Mr. Gilbert through its soft-dollar arrangement, which allowed that 30% of equity trades through its managers be directed through Pru-Bache. The board's new manager, William M. Mercer Inc., has agreed to assign a hard dollar value to its soft dollar arrangement, one reform Mr. Payne suggested.

His report also criticized the board for not knowing its duties and for not conducting a performance review of Mr. Gilbert since he was hired in 1976.

Despite the objections of then-Board Chairman Arthur Saltzstein, the board voted in June to hire a new consultant. Mr. Saltzstein also was replaced as board chairman. The new chairman will be elected during the September board meeting. The board traditionally recesses in August.

The Payne Report was prompted by the October resignation of Duamel Vellon, system coordinator and board secretary. In his resignation letter, Mr. Vellon said he was concerned about "conflicts" between Mr. Gilbert and the system's money managers. Mr. Vellon also released an Oct. 10 interoffice memo from The Boston Co., which the system had chosen earlier to manage a $100 million index fund portfolio.

"Gene Gilbert at Prudential-Bache (Milwaukee) was very helpful to us in winning this account," the memo said. "As a result, he has requested that (we) do some trading through Prudential-Bache."

Later, the memo said: "Please do not do all the trades for Milwaukee County through Pru-Bache."

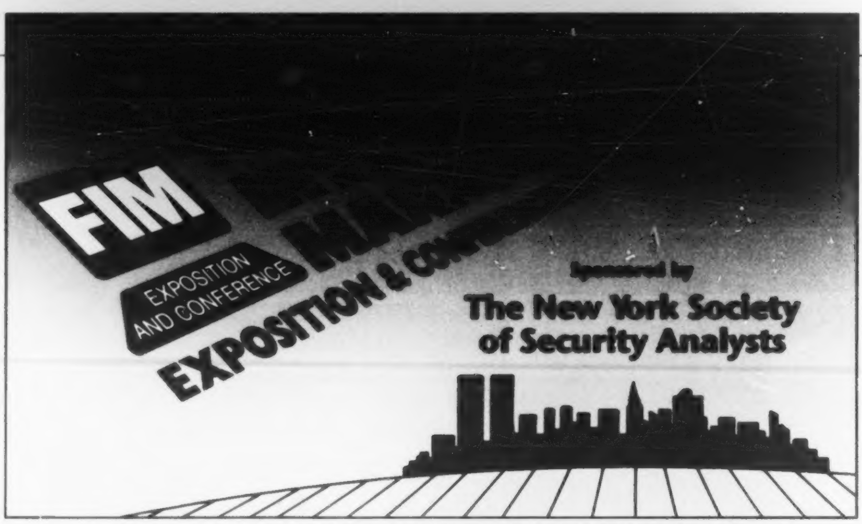
Mr. Vellon could not be reached for comment. Mr. Gilbert has denied wrongdoing and calls to his Milwaukee office were referred to Pru-Bache's New York press office.

"We are not aware of any investigation and we have not been contacted," said a Pru-Bache spokeswoman. She said the Payne Report found "no impropriety at all" by Pru-Bache or Mr. Gilbert.

Mr. Saltzstein said he had not been contacted about the investigation. ■

CORRECTIONS & CLARIFICATIONS

• The plan asset total for **BellSouth Corp.** was reported incorrectly in the balance sheet on page 23 of the July 23 issue. BellSouth has $10.857 billion in defined benefit pension fund assets.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4. Portfolio Optimization. 2:00-3:15
5. Using Computers: Research and Investment Mgmt. 2:00-3:15
6. Global Markets: Intl Programs 3:45-5:00
7. Fixed Income: Spread Analysis. 3:45-5:00
8. Luncheon Program: The Limits of Technology, M R. Bloomberg

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JNK BONDS

\nd in the center ring, ladies and gentlemen . . .

] "Because the world is round, ecause the symbol of life, unity nd the Creator is the circle, the rcus is performed in a ring. If we e willing participants, we are rawn into that ring by the performers."

No, it's not the opening of a selfelp book. Tally Embry, president of agten Asset Management Corp., ew York, is waxing poetic about e high-yield market.

In a recent report to the higheld bond manager's clients, Mr. nbry fashioned a circus analogy r the junk-bond market.

"In the center of the circus ngs, far above the rest of huanity, high in the heavens, oser to God, one person will attempt death-defying feats . . . At the present time, the junk-bond market is not defined by the action in the outer rings. There are performances being played in the center ring — death-defying acts that have all eyes riveted to see if the performers will survive. Alan Bond, Robert Campeau, Bill Farley, Merv Griffin . . . have all fallen while high above the circus floor. . . . First Boston, Shearson, Kidder Peabody, Merrill Lynch and Drexel Burnham Lambert performed the roles of catchers to these trapeze artists. One catcher died, and the rest were injured."

"We know from the circus that life goes on after the performance is over. People such as ourselves come out to clean up after the performance. We look at the debris with the bright house lights on and look for dropped change."

Broom and dust pan in hand, Magten has sifted through the debris and found attractive investments in **Bond Brewing** "because Australians drink beer;" **Federated** and **Allied Stores** "because they are attractive places to shop;" **Resorts Hotels** "because people gamble;" **Community Newspapers** "because stores advertise in local papers to reach people who buy local newspapers to read about their hometown;" and **Eastern Airlines** "because we are secured by world-class equipment."

eath-defying circus acts and junk bonds have something in common, one money manager believes.

ANKRUPTCIES

ssets growing as steamroller continues to rumble

Public bankruptcies continued swell during the first half of 90.

Total assets of public comnies filing for Chapter 11 are owing even though the number companies filing for bankptcy protection is in line with — perhaps slightly below — that past years, according to The rnaround Letter, a publication New Generation Investments :., a manager of distressed serities in Boston.

These new Chapter 11 filings are providing a steady crop of bankruptcy securities for investors. The 49 companies filing through June 15 had a total of 54 classes of bonds with an aggregate principal amount of more than $5 billion.

More big bankruptcies are likely as companies find themselves unable to make debt payments, the publication said, noting "even Donald Trump seems to be brushing up his knowledge of the bankruptcy laws these days."

Bankruptcy assets growing

Year	No. of cos.	Total assets*
1986	159	12,729
1987	113	40,654
1988	126	43,518
1989	136	72,698
1990**	49	55,567

*In millions of dollars, from annual report prior to bankruptcy filing.

**Through June 15

Source: New Generation Investments Inc., Boston

VESTING

outh Africa-free portfolios eke by

Potomac Asset Management :., Washington, and First Asset inagement, Minneapolis, had top-performing South Africae equity portfolios in the first arter, according to Brian Rom rp., New York.

'otomac led equity-plus-cash tfolios with a 3.7% return, fol-/ed by IDS Equity Advisors, nneapolis, with 0.76%. Among ity-only portfolios, First Asset nagement had a 1.2% return, followed by Smith Barney Capital Management, New York, at 1.1%.

The median South Africa-free equity-plus-cash portfolio was down 2.7% in the quarter and the median equity-only portfolio was down 3.2%. The Standard & Poor's 500 Stock Index lost 3% in the quarter, while a South Africa-free version of the index was off 3.2%. Median unrestricted portfolios, as measured by the Wilshire Cooperative Universe, were down 2.6% (equity plus cash) and 2.9% (equity only).

For the 12 months ended March 31, Provident Investment Counsel, Pasadena, Calif., had the top equity-plus-cash return, 29.4%, followed by IDS Equity, with 26.8%. Among equity-only portfolios, First Asset Management led with 25.4%, followed by Harbor Capital Management, Boston, with 23.5%.

The median South Africa-free equity-plus-cash portfolio returned 14.3% for the year and the median equity-only portfolio returned 13.8%. The S&P was up 19.2% and the South Africa-free index, 18.3%. Returns for median unrestricted portfolios were 13.5% for equity plus cash and 16.6% for equity only.

LBO investments by selected insurers

Company	Invested assets ($ bils. as of Dec. 31)	LBO investments ($ bils. as of Dec. 31)	LBOs as % of invested assets	Insurance financial strength
Equitable Life	45.3	3.7	8	Aa3
Prudential	102.3	6.1	6	Aaa
Conn. General	22.9	0.7	3	Aaa
Northwestern Mutual	26.2	0.7	3	Aaa
New York Life	44.7	1.1	3	Aaa
Metropolitan Life	92.7	2.0	2	Aaa
Travelers	31.2	0.7	2	Aa2
John Hancock	27.3	0.5	2	Aaa
Massachusetts Mutual	21.9	0.3	2	Aaa
Aetna Life	45.0	0.4	1	Aaa
TOTAL	**459.5**	**16.2**	**4**	

Source: Moody's Investors Service, New York.

INSURERS

LBOs causing a bit of perspiration

■ Higher charge-offs and nonperformers among the life insurance companies' LBO investments should weaken investment performance of the more heavily exposed insurers, according to Moody's Investors Service.

But actual losses should not be life threatening.

In a special report, the agency said it is concerned about the longterm performance of some highly leveraged transactions. Moody's said the majority of major life insurance companies' have about 2% to 3% of their invested assets in LBO investments, which is an increase of about 1% during the past 15 months. Investments in LBOs represent about 30% to 40% of the companies' statutory capital. Of the $459 billion in invested assets of 10 leading insurance companies, about $16.2 billion, or 4%, is invested in LBOs.

The ratings agency said it was concerned about the significant exposure to LBO investments at The Equitable Life Assurance Society of the United States and Prudential Life Insurance Co. of America. But the worry is cushioned by the fact that most of their LBO portfolios are in secured, private LBO financing, which Moody's expects will have lower loss content than unsecured, public market LBO debt.

Moody's stressed overall major life insurance companies have managed their exposure to these financings prudently, and the industry's exposure level remains small relative to capital.

MERGERS

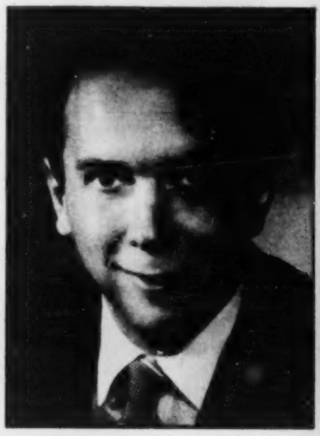
Firm helps sweep out the corners

■ Mergers can be a messy affair, and no one knows that better than Alexander B. Miller.

Mr. Miller is president of Shareholder Communications Corp., a shareholder relations consulting firm that just launched a service aptly named Postmerger Cleanup.

The service includes three programs to expedite the merging of unwieldy shareholder bases, saving corporate secretaries time and money on record-keeping and shareholder questions.

The unavoidable side effect of any merger or acquisition is a large number of unexchanged shareholder accounts. Many corporations are left with unexchanged shares caused by stock-for-stock or stock-for-cash deals. The service makes it easier for holders of small numbers of shares or "odd lots" to exchange their shares.



Alexander Miller's firm helps clean up after corporate mergers.

INTERNATIONAL

British Coal wins control of trust

■ The British Coal Board Pension Funds has won its battle for control of London-based Globe Investment Trust PLC now that several large institutional investors finally have decided to cash in their stakes.

The fund's holdings stood at almost 72% of shares July 12. That same day, the board of Globe Investment, Britain's largest investment trust, unanimously recommended accepting British Coal's offer of 205 pence (or about $3.71) per share.

The fund's original offer, revealed in April, was 1.91 pence (or about $3.45) per share.

The $20 billion pension fund is trying to acquire a 100% stake in Globe.

According to analysts, British Coal wants to buy Globe Investment Trust to invest almost 500 million pounds (or about $900 million) in the United Kingdom stock market with minimal market impact.

Ruling

Continued from page 6

the only legal avenue available.

"The issues as far as I'm concerned are independence and experience," he said. "That's the only issue involved. Everything else is clouding it."

"We are concerned that the finance department not control the pension fund, especially the direction of investment," he said.

Ms. Poitevien, 29, was hired as an aide to Finance Director Elizabeth Reveal in August 1988, after graduating from the John F. Kennedy School of Government at Harvard University.

Since then, she has served as Ms. Reveal's adviser on the pension board and functioned as the chief investment officer for the Philadelphia Gas Works Retirement Reserve.

City Treasurer and Pension Board Chairman Benjamin Blakeney discounted Mr. Campione's allegations that Ms. Poitevien could not be independent of the board of finance.

"The CIO can't act unilaterally," said Mr. Blakeney. "The individual is totally accountable to the board, and Tina clearly would not be exempt from that standard.

"To the extent that you have a dissenting contingent within the pension board stating its concern about Tina's independence from the finance board, my response would be nothing passes through the board's ranks unless the board approves it."

Ms. Reveal acknowledged some candidates had more years of investment experience, but she said they lacked experience working for a public pension fund.

The pension board subcommittee that made the recommendations calculated a weighted average for each candidate based on 10 criteria, among them experience, education and exposure to public pension plans, according to Ms. Reveal.

"She came out with the highest ranking," she said.

As chief investment officer of a public fund, "you have to deal with a board of trustees . . . with competing agendas," Ms. Reveal said.

"It's a complex process and those not in the public sector can't do it effectively.

"She has demonstrated that she can do this. She knows this fund better than anyone."

In his suit, Mr. Campione asked Judge Gafni to "rescind and/or void the official action directing the hiring of Tina Poitevien" and to "reinstitute the selection process."

In the complaint, attorneys for the plaintiffs alleged "hiring of a non-citizen of the United States of America as an employee of the Board of Pensions and Retirement patently violates the requirements of the Philadelphia Home Rule Charter" that "any employee of the city of Philadelphia must be a citizen of the United States."

City Solicitor Ralph Teti argued successfully that "blanket citizenship provisions such as those set forth in section 3-306 of the charter have been determined violative of equal protection since 1973 when the city amended its civil service regulations to conform to the law as set forth" in a U.S. Supreme Court decision.

"Plaintiffs are about 17 years late in their quest for enforcement of the citizenship requirements of 3-306 of the charter," Mr. Teti argued.

"Most recently, the Congress of the United States passed the Immigration Reform and Control Act of 1987, which specifically prohibits discrimination based on citizenship status," he said. ■

Indexing

Continued from page 3

"We no longer have any global index assets under management," said John Goodwin, vice president for The Northern Trust Co., Chicago. "We found that it was more cost effective to manage them actively. The replication costs were just too high for the amount of assets we had." Northern Trust, with $1.58 billion in indexed assets under management, had $55 million in global accounts just six months ago, but has none now.

Domestically, indexed assets totaled $243.361 billion May 31. Equity funds accounted for $175.96 billion, compared with $170.007 billion Nov. 30 and $137.667 billion a year earlier. Fixed-income funds comprised 27.7% of domestic indexed assets, or $67.401 billion, compared with $59.721 billion six months ago and $49.513 billion 12 months earlier.

The Standard & Poor's 500 Stock Index returned 6.14% for the six-month period and 16.48% for the year. The Shearson Lehman Hutton Government/Corporate Bond Index returned 0.94% for six months and 8.84% for the year.

Some managers said they see a trend away from the S&P as a benchmark, and into such things as customized indexing where there is a distinct management style and characteristic; a more dynamic style with a general objective that is defined by the client as to how the portfolio should be managed; and a move to other indexes such as the Wilshire 5000 Value Weighted Index.

"The trend away from the S&P is because it has done so well and may not be able to do well in the future," said Scott Stewart, senior vice president of Fidelity Management Trust Co., Boston. "As you go beyond the S&P, you think about active managing," he said. Fidelity has $401 million in indexing. ■

Leading index fund managers
($ millions - as of May 31)

Company	Total	Domestic equity	Domestic fixed	Int'l equity	Int'l fixed
Wells Fargo	77,154	48,538	24,196	4,198	222
Bankers Trust	44,300	37,000	4,100	3,100	100
Mellon Capital	28,227	23,074	4,507	646	0
State Street Bank	27,728	17,008	2,437	8,164	119
ANB Investment[a]	10,500	NA	NA	NA	NA
Alliance	7,885	7,191	21	673	0
PanAgora Asset Mgmt.	6,876	4,476	1,597	405	398
Mellon Bond	6,600	0	6,600	0	0
GE Investments	5,643	5,643	0	0	0
Dimensional Fund	5,568	3,900	733	935	0
Manufacturers Nat'l Detroit	4,537	4,500	33	4	0
Wilshire	4,211	4,211	0	0	0
Chase Investors	4,200	1,900	1,000	1,300	0
Pacific Investment	3,950	750	3,200	0	0
T. Rowe Price	3,950	315	3,635	0	0
Lincoln Capital	3,800	0	3,800	0	0
Vanguard	3,096	2,927	157	12	0
Chancellor Capital	1,672	1,527	120	25	0
INTECH	1,650	1,400	0	250	0
Northern	1,580	1,305	275	0	0
Prudential Fixed Income	1,410	0	1,410	0	0
Travelers	1,357	882	185	266	24
Putnam	1,220	0	1,220	0	0
Lehman Ark	1,196	0	1,196	0	0
BEA Associates[b]	1,191	1,191	0	0	0
Security Capital	1,170	0	1,058	0	112
Lehman Mgmt.	1,133	0	1,133	0	0
Sears	1,015	920	0	95	0
Nikko Capital	943	657	0	286	0
Mitchell Hutchins	920	255	665	0	0
Advanced Investment	880	870	10	0	0
WR Lazard	859	0	859	0	0
Axe-Core	850	500	0	350	0
Aetna Life	803	475	328	0	0
Boston Int'l	799	0	0	799	0
Smith Barney	770	0	770	0	0
NCNB Texas	740	740	0	0	0
ASB Capital	650	650	0	0	0
First Wisconsin[c]	520	115	405	NA	NA
Capstone Asset	500	500	0	0	0
Boatmen's	487	470	17	0	0
Ryan Labs	460	0	460	0	0
Harris Trust	440	440	0	0	0
Atlantic Portfolio	439	0	439	0	0
Fidelity	401	400	1	0	0
Associated Capital	350	294	56	0	0
Monitor Capital	314	116	152	46	0
Bear, Stearns	292	0	292	0	0
RXR Group	291	NA	NA	0	131
Old Kent Bank	280	280	0	0	0
Todd Investment	258	0	258	0	0
NBD Bancorp	255	255	0	0	0
Metropolitan Life	181	181	0	0	0
The Clifton Group	180	104	76	0	0
Total	**276,681**	**175,960**	**67,401**	**21,554**	**1,106**

[a] - As of Nov. 30
[b] - As of March 31
[c] - $6 million in international indexed assets is managed on First Wisconsin's behalf by State Street, and is included in State Street's figures.

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August 20, 1990

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AT DEADLINE

Judge appoints 2 overseers

A federal court judge has appointed Jack Taffer, a Miami attorney, to oversee the real estate assets of the Operating Engineers Local 675 pension fund. Martin Steinberg, another Miami attorney, also was named special counsel for all other aspects of the local's pension and health plans.

The judge, however, refused a request by the Department of Labor — which is suing the trustees for investing 95% of plan assets in real estate — to remove the plan trustees.

N.Y.C. fund assesses tax

The $45 billion New York City Retirement System stands to lose $50 million annually in direct payment of the proposed 0.5% excise tax on securities transactions under review by the Bush administration.

And, if the Congressional Research Service's prediction — that the tax also could cause a 9.3% to 14.6% decline in the stock market — pans out, the fund could lose another $1.2 billion to $1.9 billion on its stock holdings.

The estimates were issued by Comptroller Elizabeth Holtzman.

In a separate development, the pension fund has agreed to purchase as much as $100 million in mortgage-backed securities issued by the Federal National Mortgage Association as part of a program designed to make home ownership more affordable.

Consultant, 2 managers hired

The $11 million Giant Food Stores pension fund hired Shearson Lehman Brothers Consulting Group as its first pension fund consultant. Shearson, in turn, helped the fund select Avatar Associates and Newbold's Asset Management Inc. to run between $5 million and $6 million each in balanced accounts. They replace Hahn Holland & Grossman, which had managed all the fund's assets.

The change was part of a restructuring of the fund's assets, said Ernie Smith, Giant Food Stores' chief financial officer and vice president of finance.

First City taps execs for unit

First City Bankcorp. of Texas has formed a merchant banking group to pursue management buy-outs, recapitalizations, expansions and divestitures for Southwest-based companies.

Jeffrey T. Hinson, who recently joined First City from Texas Commerce Bank in Houston, will serve as president. Managing directors are J. Brad Fillmore and Steven E. Seach, also former Texas Commerce executives.

Decere joins consulting firm

Martin Decere, treasurer and director with Raymark Industries, resigned to join Cash Tech Consulting as director of cash and treasury management consulting. He will be responsible for ensuring the execution and quality of the firm's cash management consulting practice.

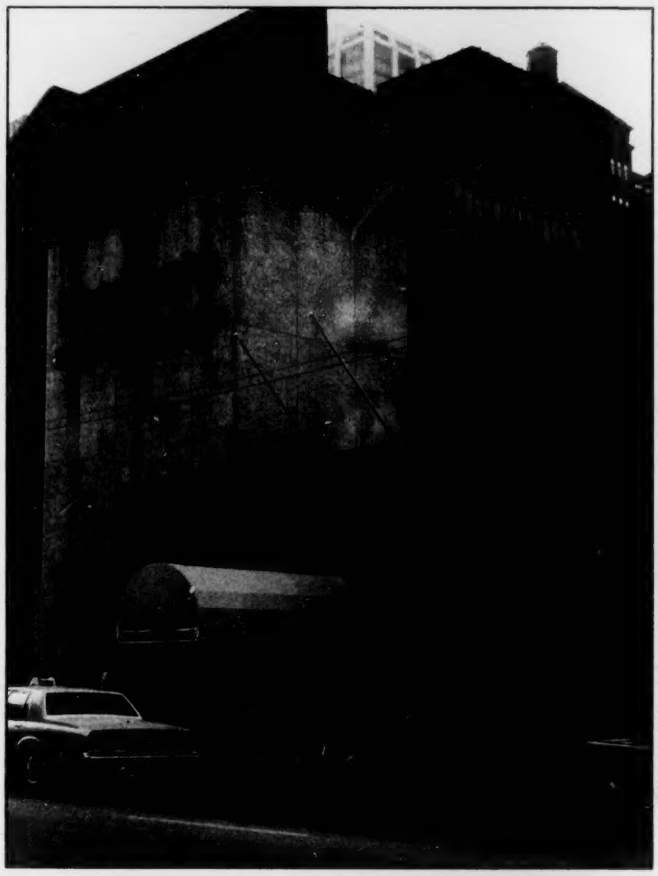

Photo by Anthony F. Ficke

Isosceles wants to boost the profitability of Herman's World of Sporting Goods before putting the business on the selling block.

Big European LBO on edge of collapse

By Marcia Parker

Gateway Corp., Britain's first big public leveraged buy-out and one of Europe's largest, is faltering.

Indeed, in the next few days, Gateway is expected to report a sizable loss. Meanwhile, talks with shareholders and creditors on restructuring, a possible equity infusion and other options are under way.

One year after Isosceles PLC, a a British investor group that included S.G. Warburg & Co. and Wasserstein, Perella & Co., acquired Gateway, the stock has plummeted to $10.40 (5.5 pounds) from about $47.40 (30 pounds). The $47.40 figure is based on the prevailing exchange rate when the buy-out was completed; all other dollar figures refer to current exchange rates, although the pound's value has dropped recently against the dollar.

The plunge in publicly traded Isosceles units left a trail of unhappy big-name U.S. and European institutional shareholders and creditors and has elevated the tension at the bargaining table.

Only a few buy-outs have tottered in Britain, where less debt is used than in the United States.

The contest for control of Gateway was one of 1989's most heated global takeover battles, pitting investment banking titans Warburg and Wasserstein, Perella against each other.

Although Warburg was the victor, the two sides worked out a compromise in which Wasserstein and The Great Atlantic & Pacific Tea Co. — the U.S. supermarket chain that teamed up with Wasserstein to make a rival bid for Gateway against the Warburg group — got a significant equity stake. It was a premier deal for Wasserstein, which was beginning a major European push. It also was selected as one of *Pensions & Investments*' deals of the year (*P&I*, Jan. 8).

Even though sales, profits and cash flow have exceeded expectations, asset disposals haven't kept the expected pace. As a result, debt wasn't pared as much hoped.

Since Isosceles management has decided to keep more of the assets than it originally planned — including Herman's World of Sporting Goods, the U.S. sporting goods chain — the cash that would have been generated from asset sales won't be available to

See **LBO trouble** *on page 37*

Government hits at underfunding

Huge surcharges under consideration

By Joel Chernoff

WASHINGTON — Employers with underfunded pension plans could get slapped with a hefty surcharge on premiums paid to the Pension Benefit Guaranty Corp. under options being considered by the Bush administration.

In addition, the administration might consider reducing the amount of benefits guaranteed by the PBGC when certain "trigger points" are reached. It also wants to eliminate coverage of contingent benefits, such as plant shutdown benefits, which unions fiercely guard.

The changes, contained in a list of budget options developed by the Office of Management and Budget, could raise costs for employers — particularly for those with union-negotiated plans — because of the way in which such plans are funded. Some large employers still could face significant cost increases.

Currently, employers with fully funded single-employer plans pay an annual premium of $16 per participant to the PBGC, while those with underfunded plans pay a surcharge of up to $34 per participant, depending on the level of funding.

"I think it's a serious retreat from the historic role the PBGC has played as a safety net" for private pensions, said James Klein, deputy executive director of the Association of Private Pension and Welfare Plans, Washington.

The changes would help the government limit its exposure to potential liabilities in so-called "government-sponsored enterprises." The government is on the hook for losses experienced by such entities, but has little control over that exposure.

OMB Director Richard Darman has termed such potential liabilities a "hidden Pac-Man" because of their capability of gobbling up billions of dollars in federal money.

So far, debates have raged over the effect of imposing tougher credit standards on such institutions as the Federal National Mortgage Association and the Student Loan Marketing Association. It is clear, however, the administration also has its eye on

See **PBGC** *on page 35*

PBGC chief James A. Lockhart III says his agency's exposure is a "hidden Pac-Man."

EC funds get ready

New rules to liberalize pension investing

By Margaret Price

Pension executives at some multinational companies are preparing for major changes in the way their European pension funds invest.

A draft of European Commission directives on pension funds is expected to be issued in fall, but officials of Unisys Corp. and IBM Corp. already are exploring ways to take advantage of a unified, more liberal European market. While Unisys and IBM are at the forefront, it may take longer for executives at other companies to educate themselves on the pending rules and to establish appropriate policies.

The commission aims to break down national rules so employees gain more mobility and investing of the EC's retirement assets is liberalized. The rules would affect all companies operating in Europe.

The commission's goals were outlined in a speech by Sir Leon Brittan, the European Commission's vice president for competition and financial institutions. The aims are to "ensure full freedom of cross-border membership of pension funds within the EC, and thus to open up the possibility of pan-European funds; to ensure full freedom to provide the service of managing pension funds; (and) to ensure full freedom of cross-border investment of pension fund assets."

See **Pension funds** *on page 38*

NEWS DIGEST

Flextronics Inc., an electronics manufacturer with significant operations in Asia, has completed a recapitalization plan that included Hong Kong institutional investors. Page 6.

The boost to corporate profits from declining pension expense is ending, a Kidder Peabody study shows. Page 4.

Ford Motor will retain some surplus pension assets as part of the sale of Ford Aerospace to Loral Corp. Page 39.

SPECIAL REPORT: PIPER

Second quarter investment returns for domestic equity and fixed-income, international and real estate pooled funds in the PIPER and PIPER+ universes are tallied. Page 17.

FINANCING

Gateway Corp. shareholders and creditors are trying to save the U.K.'s first big buy-out. Page 1.

Cincinnati Bell's ESOP issue attracted strong interest from institutional investors. Page 2.

Corporate executives have postponed borrowing activities, waiting for the dust to settle in the Middle East. Page 39.

INTERNATIONAL

Unisys and IBM are exploring the advantages of a pan-European pension strategy. Page 1.

The Middle East crisis has created buying opportunities for investors pursuing international plans. Page 3.

REAL ESTATE

Former National Property Advisors staffers failed to retain management of the disbanded firm's assets. Page 2.

Oil belt property markets won't see much immediate benefit from the rise in oil prices. Page 3.

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Survey questionnaires in the mail

***Pensions & Investments*' annual directory of master trust/custody and global custody banks, and biennial survey of pension executives and money managers on their satisfaction with master trust services, are under way. Questionnaires were mailed July 24 and are due Aug. 27. If your organization has not received a questionnaire or if you have a question about the surveys please contact Christine Philip, directory coordinator, at (312) 649-5217.**

Buyers grab ESOP notes

Cincinnati Bell to lend $72 million in proceeds to plan

By Marlene Givant Star

CINCINNATI — Cincinnati Bell Inc. financed its $72 million employee stock ownership plan at the lowest cost for any publicly financed ESOP.

Investors snapped up its 10-year notes, which carried a 9.1% coupon.

The fact that the issue — among a growing number of offerings in the public market to fund ESOPs — was sold to insurance companies as well as pension funds underscores how hungry institutional investors are for quality corporate paper. A lot of money insurers used to invest in tax-advantaged ESOP paper, which is scarcer now that the tax law has changed, is being funneled into taxable investments like ESOP notes.

Cincinnati Bell's employee stock ownership plan deal differed from others in that it will involve back-to-back notes issues. Cincinnati Bell borrowed well in advance of the formation of the ESOP, and will lend the proceeds to the ESOP. In other deals, an ESOP borrows directly in the public market and the company guarantees the ESOP debt.

"We're trying to set up ESOP trusts effective Oct. 1. We used to have a PAYSOP. This is the first (leveraged ESOP) we've done," said Leonard Haussler, assistant secretary.

The issue of 9.1% notes due June 15, 2000 was sole managed by Morgan Stanley & Co. Inc., New York.

By tapping the public market, Cincinnati Bell is following in the footsteps of two other telephone companies. Bell South Corp., which went to market with a $275 million offering Jan. 24, was the first company to issue public debt for use in an ESOP (*Pensions & Investments*, Feb. 5). NYNEX Corp. issued $500 million to create an ESOP (*P&I*, March 19).

Prior to the Cincinnati Bell deal, Mobil Oil Corp.'s $800 million offering represented the cheapest cost of funds, carrying a coupon of 9.17%, according to Paul Mazzilli, principal of Morgan Stanley.

Cincinnati Bell's "back-to-back notes structure" — which also has been used this year by Consolidated Rail Corp., Dayton Hudson Corp. and Chubb Corp. — is becoming increasingly popular because of the built-in flexibility it affords issuers. Typically a company might issue 15-year notes pre-payable any time and subsequently lend to the ESOP under its own terms.

In a more conventional ESOP financing structure like Mobil's, in which the ESOP borrows in the public market directly with the

See **ESOP** *on page 38*

Termination spurs lawsuit

Laid-off workers want piece of pie

By Joel Chernoff

Photo by Anthony F. Ficke

DeSoto, which recently sold this Chicago Heights, Ill., plant, is being sued by former employees who want benefits they would have accrued had they not been dismissed.

Four former employees of DeSoto Inc. have charged the company laid off 10% of its work force late last year in order to swell its pension fund coffers and help avert a takeover attempt.

The former employees have filed suit in U.S. District Court in Chicago to stop the Des Plaines, Ill.-based paint and chemical manufacturer from terminating its plan and distributing $28 million in after-tax surplus assets to shareholders. They also want monetary damages to provide them with the benefits they would have accrued had they not been dismissed.

The lawsuit will provide a new test as to whether employees have rights to future benefit accruals, though earlier rulings have upheld employers' right to terminate their overfunded pension plans.

Michael Gordon, a Washington pension lawyer, called the litigation "a long shot." Another pension lawyer, who asked not to be named, was more optimistic, saying the unusual set of facts in the case may give workers a boost.

The former DeSoto employees, who are seeking permission to represent a class of older workers dismissed by the firm last year, charge the company's actions violated a provision of the 1974 Employee Retirement Income Security Act that prohibits interference with plan participants' attainment of pension rights.

"The funds which DeSoto proposes to distribute to shareholders as purportedly 'excess' pension

See **Termination** *on page 38*

Karsten gets NPA properties

By Terry Williams

Karsten Realty Advisors has assumed investment management of about $100 million of property in three group trusts from National Property Advisors.

The decision means NPA staffers were unsuccessful in their attempt to continue managing the assets by affiliating with another firm.

"It leaves us looking for jobs," said Andrew McGregor, president of NPA. "There is still a great deal of affinity for working together as a team, though I have suggested to people to look for employment on their own because chances of (affiliating with an adviser) are slim."

Karsten, Los Angeles, also takes over management from NPA of the $60 million general account of National Property Life Insurance Co., Montpelier, Vt.

NPA, Atlanta, was disbanded in May when its employees accepted voluntary separation benefits offered by National Life Insurance Co., its parent company.

The offer was made as a result of a restructuring by the insurer. It was not National Life's intent to eliminate NPA, but when offered the benefits, all but two of NPA's 27 employees accepted.

Instead of rebuilding a real estate investment management division, the insurer decided to seek a third-party manager, according to Kenniston P. Merrill, vice president and chief investment officer.

Mr. McGregor said NPA employees sought an affiliation with Montgomery Asset Management of San Francisco in hopes of continuing to manage NPA's assets. But the affiliation was contingent on the NPA employees gaining management of the properties, he said.

While he praised Karsten as an excellent firm, Mr. McGregor said the best choice would have been for investors to contract with the current management.

It was the pension fund spon-

See **Karsten** *on page 37*

Investors calm after Iraq attack

Funds 'steady on the rudder'

P&I Special Report

Institutional investors reacted almly to the crisis in the Middle ast, though a few growth stock anagers took advantage of the arket drop to buy some barains.

Typical of those who oversee rge tax-exempt funds was John nglish, vice president and chief vestment officer for the $5.6 illion Ford Foundation, New ork: "We have had daily meetgs to discuss the situation, and e have received many outside lls (from investment managers) ut we are steady on the rudder."

John Bell, assistant treasurer, onsolidated Edison Co., New ork, has "the distinct impression e managers are making few hanges" because he has gotten w calls. Money managers for on Ed's $3 billion pension fund ave full discretion, but let fund ecutives know when they make bstantial changes in their portlios.

Myra Drucker, director-trust vestments, International Paper ., Purchase, N.Y., said she is ill trying to "assimilate what it l means. I think the market has scounted most of the impact of e crisis, unless one is going to npose a really tough scenario. 's not the kind of situation here I want to react quickly. We ve talked to a number of maners, and I am not getting the eling yet that we ought to be in panic situation."

Among her $2.7 billion fund's anagers, Ms. Drucker said, one m had shaved its equity posin, but had been nervous about e market before Iraq invaded uwait.

Ms. Drucker especially wants to lk to her fund's fixed-income anagers: "That's where the consing signals are to me."

John Carroll, president, GTE vestment Management Corp., amford, Conn., noted the crisis ll is unfolding, and it's too early make any investment strategy asset allocation changes in TE's $10.7 billion fund.

Consultants agree clients acted calmly.

"None has called about this," id George Berla, principal of Berla Investment Consulting, Walnut Creek, Calif. "The ones I have contacted have not expressed a great deal of concern."

As a result, pension funds are sticking with their asset allocation strategies and are not altering their actuarial assumptions.

"There hasn't been any particular desire to respond in some way," said Ron J. Surz, a principal with Becker, Burke Associates, Chicago. "They are taking a wait-and-see attitude.

"We would encourage that," Mr. Surz said. "We take the view that (pension investments) are long term in nature, and it's impossible to call the trends in the market. We recommend they stick to their guns and wait out the storm."

James Knupp, a principal with Ennis, Knupp & Associates, Chicago, said the crisis is just one of the traumas long-term investors go through.

In last year's fourth quarter, there was trauma in all types of equities. In the first quarter of 1990, the trauma was in foreign stocks, said Mr. Knupp.

Some growth stock managers reacted by taking advantage of the decline in stock prices caused by the Iraqi invasion to invest a chunk of their cash reserves.

Sounding optimistic, Michael Wolf, vice president-senior portfolio manager, IDS Advisory Corp., Minneapolis, said the firm "increased holdings of oil services companies" for those portfolios underweighted in the sector. Most of its portfolios, however, already held about a market weighting of 14% before Iraq's takeover of Kuwait.

"We were fairly invested (before the invasion), holding 8% to 12% cash in portfolios," he said.

Said Ashby M. Foote III, chief investment officer at Vector Money Management Inc., Jackson, Miss.: "We've taken advantage of some weak areas of the market to add positions in companies we really like," particularly in the technology, automobile and retail sectors.

"The knee-jerk reaction was that this (invasion) guarantees a recession," Mr. Foote said. "So all the stocks that depend on a good

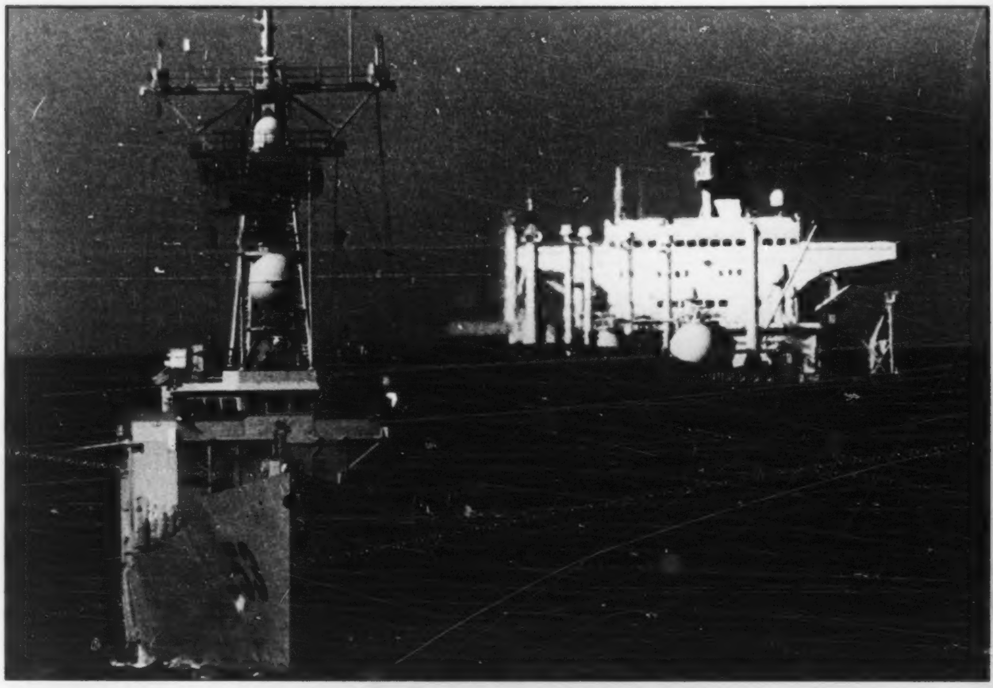
See **Investors calm** *on page 35*

Impact of crisis on the market
(S&P 500 returns by sector Aug. 1-13)

Industries	%
Business equip. & serv.	−5.33
Capital goods	−7.26
Consumer durables	−9.81
Consumer non-durables	−4.00
Consumer sevices	−7.61
Energy	0.96
Financial services	−4.66
Health care	−5.21
Multi-industry	−5.47
Raw materials	−5.71
Retail	−5.39
Shelter	−6.45
Technology	−5.77
Transportation	−8.47
Utilities	−3.74
Universe	−4.46

Beta*	%
0.0 - 0.9	−2.18
0.9 - 1.1	−3.91
1.1 - 1.3	−6.86
1.3 - 1.5	−5.65
Above 1.5	−6.62
Universe	−4.46
Yield*	**%**
0.0	−7.63
0.0 - 3.0	−4.88
3.0 - 5.0	−3.54
5.0 - 8.0	−5.21
Above 8.0	−3.12
Universe	−4.46
p/e*	**%**
0.0 - 8.0	−5.41
8.0 - 12.0	−5.80
12.0 - 16.0	−4.97
Above 16.0	−3.58
N/A	−3.42
Universe	−4.46

Source: Mellon Capital Management Corp.
*By quintile



AP/Wide World Photos

Despite a possible interruption in the flow of oil from the Persian Gulf because of continuing tensions in the Middle East, U.S. pension fund executives are cautiously proceeding with plans to invest internationally. Some money managers, however, are raising cash.

Pension executives continue international investment plans

By Margaret Price and Curtis Vosti

Bearishness toward non-U.S. equity markets is rising among money managers, but some tax-exempt investors are proceeding with their international investing plans.

Some managers and investors talk of "buying opportunities" sparked by recent market declines. Still, caution remains the watchword, and most investment managers prefer to sit tight or even raise cash.

Among tax-exempt funds, the crisis and its expected repercussions don't seem to be deterring foreign investing.

"International programs will stay in place and when things settle down a little, people will be moving ahead with their overseas allocations," said Jim Waterman, a senior vice president with InterSec Research Corp., Stamford, Conn.

Robert J. Kolyer Jr., assistant vice president-investments for the $430 million endowment of Brown University, Providence, R.I., said the endowment is going ahead with plans to invest globally — about 5% of assets initially. He hopes to hire "one or two very experienced" global equity managers in the next three to six months.

In the long run, the greater diversification will enhance returns, he said.

The approximately $155 million Tucson Supplemental Retirement System is continuing its funding schedule for the two international money managers it hired this year: Fiduciary Trust Co. International, New York, for international fixed income, and Murray Johnstone International Ltd., Chicago, for equities.

The pension fund made its initial allocation of $2 million to Fiduciary on July 2, and plans to fund $1 million a month up to a total of $8 million. With international equities, the fund made a $2 million allocation in August and will "probably add $1 million each quarter up to a total of $8 million," said Michael Parisi, treasury administrator.

The reasons for not postponing

See **International** *on page 37*

No oil belt windfall expected

Troubled U.S. real estate market sees mild recovery at best

By Steve Hemmerick

The rise in oil prices resulting from Iraq's invasion of Kuwait likely will provide only mild help to real estate markets in oil belt states where pension funds hold more than $2 billion in property investments.

As yet, the price of oil hasn't risen sufficiently to bail out investors who had taken hundreds of millions of dollars in write-downs on commercial real estate in Texas, Oklahoma, Louisiana, Arkansas and Colorado.

Yet, some help for the troubled real estate markets is expected. "Yes, there will be a recovery, but it won't be all-out gang busters," said David Shulman, director of bond market research at Salomon Brothers Inc., New York.

"I think it will be a boomlet," agreed Richard Kateley, president of Real Estate Research Corp., Chicago.

Developers went on bank-financed building sprees in the Southwest during the late 1970s and early 1980s.

In addition to easy financing, the consensus view that oil would climb to between $60 and $100 a barrel — which never happened — and oil-based economies would flourish further fueled construction.

In the last few weeks, oil has jumped to about $26 a barrel from $16 a barrel. While Mr. Shulman called the price increase "a positive" for oil states, he noted the price of oil, on an inflation-adjusted basis, would need to rise to $57 per barrel just to reach its former peak.

Not only is the price of oil still well below its peak, but also the euphoric outlook on what the rising price of oil will bring to the Southwest is gone, he said.

Mr. Kateley said Houston should benefit the most from the oil-led recovery in office properties since most of the oil companies consolidated their operations in that city after the collapse in oil prices in 1986.

While he said he'd expect less improvement in the office sector in Denver, Oklahoma City, Tulsa and even Dallas, he added there would be a "ripple effect" to other real estate markets.

He added distribution warehouses probably would benefit as drilling equipment is moved from one site to another.

Even so, Mr. Kateley said conservation measures could lead to less oil consumption, thus negating at least partially any price increases.

Before any positive effect could take place, some think it would have to be shown that higher oil prices are not just temporary.

People in the oil belt states now

See **Oil belt** *on page 35*

Managers playing it safe

efensive portfolios shine brightly during short term

Marlene Givant Star

Stocks in such bellwether in- stries as pharmaceuticals and d and beverages propelled re- ns of the top PIPER equity ids above 14% during the quar- ended June 30.

And many managers now are coming even more defensive in nt of the current turmoil in the ddle East.

Safety was profitable in fixed- ome, too, as government-re- ed bonds were strong per- mers during the three-month iod.

Shearson Trust Co.'s EF7 com- ngled equity fund was the top ity fund in Pensions & Invest- nts' Performance Evaluation port for the three- and 12- nth periods, with returns of 17.88% and 40.96% respectively.

Boatmen's Trust Co.'s Bond Fund F topped the fixed-income roster for the quarter with a 5.27% gain. Mercantile Bank, Joplin, Mo., far exceeded other funds for the year with a 17.09% return and also ranked second for the quarter with 4.93%.

For periods ended June 30, the median PIPER equity return was 6.28% for the quarter, 15.9% for the year and 15.76% for the five years. Returns for periods of more than one year are compound annualized. The Standard & Poor's 500 Stock Index beat the median for all the periods returning 6.3%; 16.51% and 17.3%, respectively.

The median PIPER bond fund returned 3.2% for the quarter, 7.62% for the year and 9.79% for the five years. The median lagged the Shearson Lehman Hutton Government/Corporate Bond Index for all periods but the 12 months. The index gained 3.6% for the quarter; 7.11% for the year and 10.31% for five years.

The PIPER universes are compiled by Rogers, Casey & Associates, Darien, Conn. The equity universe consists of 332 commingled funds of banks and insurance companies, and the fixed-income universe, 302 funds.

Among equity funds, defensive plays yielded the best results during the second quarter. The common stock fund of Princeton Bank & Trust, East Brunswick, N.J., a runner-up for the 12 months with a return of 37.8%, was buoyed during the quarter by its emphasis on companies in capital goods and consumer staple industries.

The $45 million fund had 23% in consumer staples such as pharmaceuticals and 12.9% in capital goods such as pollution control stocks as of June 30. **General Electric Co.**, one of the fund's top capital goods holdings, has been a strong performer this year as has Britain's **Glaxo Holdings**, the world's third largest pharmaceutical company. Princeton invests in Glaxo's American depository receipts. A big pollution control holding is the over-the-counter traded Class B shares of Canada's **Laidlaw Inc.**, the world's second largest solid waste company.

Third-quarter returns also might shine for Princeton as the firm fortuitously began overweighting energy stocks two months ago, just in time for the Iraqi invasion of oil-rich Kuwait. Energy stocks were increased since June to 20% from 14.2% with the accumulation of **Exxon Corp.** stock at a price of $47. Now the stock trades at $54. "Oil was the only area of the market that went up in the last month," noted Frank Lane, chief investment officer.

In third place for the year was Chancellor Capital Management's $36 million Select Growth fund, which invests in high-quality large-capitalization growth stocks and normally has a bias toward food, beverage and tobacco stocks; health care and retail companies. "In the first six months, those stocks tended to

See **Defense** *on page 31*

PIPER equity funds
(periods ended June 30)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	17.88%	40.96%	17.90%	24.19%	25.44%
First quartile	8.16	18.98	10.47	17.24	17.63
Median	6.28	15.90	9.14	15.76	16.60
Third quartile	3.90	11.27	7.71	14.33	14.95
Lowest return	−4.53	−7.70	−12.25	2.63	10.75
S&P 500	**6.30**	**16.51**	**9.29**	**17.30**	**16.93**

PIPER fixed-income funds
(periods ended June 30)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	5.27%	17.09%	11.37%	13.46%	14.30%
First quartile	3.47	8.21	9.21	10.57	11.74
Median	3.20	7.62	8.74	9.79	11.03
Third quartile	2.86	6.84	8.21	9.08	10.62
Lowest return	0.20	−3.15	5.27	4.15	7.36
SLH G/C	**3.60**	**7.11**	**8.95**	**10.31**	**11.63**

PIPER special equity funds
(periods ended June 30)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	16.99%	37.63%	20.14%	29.71%	21.17%
First quartile	9.51	18.21	11.77	16.07	17.75
Median	6.75	10.82	8.83	13.42	15.67
Third quartile	3.78	4.41	4.99	11.41	12.40
Lowest return	−2.00	−9.71	−7.34	2.84	10.22
S&P 500	**6.30**	**16.51**	**9.29**	**17.30**	**16.93**
Russell 2000	**3.86**	**3.05**	**2.91**	**9.57**	**14.16**

PIPER+ equity funds
(periods ended June 30)

	Quarter	1 yr.	3 yr.	5 yr.	10 y
Highest return	25.40%	70.64%	57.03%	29.84%	29.82%
First quartile	10.04	22.02	12.14	18.95	20.57
Median	6.31	15.04	10.04	16.72	18.50
Third quartile	4.08	9.06	7.77	14.88	16.86
Lowest return	−3.22	−6.23	−1.78	7.58	13.00
S&P 500	**6.30**	**16.51**	**9.29**	**17.30**	**16.93**

PIPER+ fixed-income funds
(periods ended June 30)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	6.43%	10.47%	11.72%	15.89%	16.87%
First quartile	3.56	8.18	9.43	11.21	12.96
Median	3.23	7.38	8.95	10.46	11.99
Third quartile	2.80	6.46	8.53	9.73	11.37
Lowest return	1.41	−7.58	4.12	7.71	8.92
SLH G/C	**3.60**	**7.11**	**8.95**	**10.31**	**11.63**

PIPER+ special equity funds
(periods ended June 30)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	12.55%	44.36%	38.47%	32.78%	22.55%
First quartile	6.60	14.35	9.60	15.64	15.18
Median	4.50	4.43	6.69	10.61	13.38
Third quartile	1.98	−0.97	4.63	9.24	12.31
Lowest return	−9.51	−9.65	1.66	6.55	9.75
S&P 500	**6.30**	**16.51**	**9.29**	**17.30**	**16.93**
Russell 2000	**3.86**	**3.05**	**2.91**	**9.57**	**14.16**

PIPER+ balanced/TAA funds
(periods ended June 30)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	13.00%	25.74%	18.65%	25.06%	23.74%
First quartile	6.40	14.14	10.63	16.08	17.57
Median	4.82	12.03	9.57	14.76	15.76
Third quartile	3.90	10.03	8.40	13.19	14.94
Lowest return	0.54	−0.28	2.92	7.24	11.68

Growth stocks boost investment returns

By Terry Williams

Growth stocks fueled the returns of PIPER+ equity and balanced investment managers during the quarter and year ended June 30.

The top-performing PIPER+ equity funds for the quarter ended June 30 were Combined Capital Management Inc.'s Rangeley Partners Fund with a return of 25.4%; Cheswick Investment Co.'s equity composite, with 22.7%; and Mt. Auburn Management's Concentration fund, with 17.4%.

The median PIPER+ equity fund advanced 6.31%, edging the Standard & Poor's 500 Stock Index by one basis point.

For the year ended June 30, Dawson Samberg Capital Management's Growth Pequot Limited Partnership outdistanced its nearest counterpart by almost 26 percentage points with a 70.64% return.

Dawson Samberg was followed by Provident Investment Counsel's Stellar Fund with a 44.75% return, and Cheswick Investment's equity composite, with 41.44%. For the year, the S&P 500 returned 16.51% and the PIPER+ median fund rose 15.04%.

Combined Capital is a stock picker, according to Van Whisnand, a partner with the firm. Its 18-month-old Rangeley fund has about $6 million in assets.

"We don't invest on the prediction of economic cycles or international events or the course of interest rates," Mr. Whisnand said. "We can't predict those with certainty or consistency."

The criteria Combined Capital uses to select growth stocks include earnings per share growth of at least 20% for a minimum of five years, a minimum 20% return on equity and little or no debt. There is no capitalization requirement for the companies selected.

Combined Capital also likes companies that Mr. Whisnand described as "shareholder friendly." These are companies that do stock repurchases, dividend increases and spinoffs. Companies that are focused and not widely diversified also are appealing.

See **Growth** *on page 32*

Guide to rankings

PIPER:	
Top 20% fixed-income	29
Top fixed income/size	30
Top 20% equity funds	27
Top equity by size	28
International funds	30
Top 20% special equity	30
PIPER+	
Top 20% fixed-income	24
Top 20% equity funds	22
Top 20% international	27
Top 20% global funds	27
Top 20% special equity	26
Top 20% balanced/TAA	25

Retail performance stumbles

Steve Hemmerick

etail-mall-dominated JMB In- utional Realty Corp. closed- l investment trusts have ped from their leading posi- s in the Pensions & Invest- its' Performance Evaluation ort.

he slip could indicate retail ls won't continue showing r sharp climb in property ies.

ut so far malls are providing ng income return. That is a ık for pension funds, which l high prices for malls in 1989.

rdinarily, all JMB trusts are he top 30% in performance ng PIPER funds, and several e made the top 10% repeatedly ecent years.

ut for the 12 months ended March 31, the best performing JMB trust, Group Trust III, ranked 21 among 54 closed-end real estate funds. The fund's 8.45% return for the year put it in the top 40% of closed-end funds, but several other typically top-ranked JMB funds ranked even lower. Ranking in the fifth decile were JMB Group Trust II, which returned 7.29%; Group Trust I, 7.28%; and JMB Endowment II, 7.17%.

JMB Institutional Realty Endowment I returned 7.08%, ranking in the sixth decile; JMB Group Trust IV returned 6.5%, placing in the seventh decile; and JMB Institutional Endowment III returned 4.57%, finishing in the ninth decile.

A year ago, JMB Group Trusts II and IV were in the top 10% in the PIPER universe for the 12-month period and Group Trusts I and III were in the top 20%.

One reason the JMB trusts and endowment funds have been high performing is their significant percentage of assets in retail malls.

Just more than one-half of the properties in JMB Group Trusts I and II, for example, are retail malls. In the past several years, the appreciation component of return for retail investments has shot upward and made retail the top-performing category in real estate investment.

But in the first quarter of this year, retail properties turned in flat appreciation performance in the South and West, according to the Russell-NCREIF Property Index of real estate properties.

Appreciation performance for

See **Stumble** *on page 32*

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Healthy investments pay

Health-related issues create winners in special equity

By Curtis Vosti

Health-related issues helped the top funds in the special equity universe of Pensions & Investments' Performance Evaluation Reports and PIPER + in the second quarter.

Chancellor Capital Management Inc.'s emerging health care fund was the top performer for both the quarter and the year ended June 30 among the 78 bank and insurance company commingled funds in the PIPER universe. The fund returned 16.99% and 37.63%, respectively.

"Biotechnology has finally arrived," said Parag Saxena, the fund's managing director. The $100 million emerging health care fund concentrates on small-capitalization companies, and has an average market capitalization of $200 million among its 50 issues.

The fund has "eclectic investments in health care," Mr. Saxena said, with average annual turnover between 20% and 30%. The firm is invested in five broad medical categories: biotechnology, 18%; medical products, 17%; small pharmaceuticals, 16%; extended care and specialized facilities, 18%; and medical distribution companies, 18%.

Holdings include **Synergen Inc.**, **Scimed Life Systems Inc.** and **United Healthcare Corp.**, he said.

Finishing behind the Chancellor fund for the quarter were Equitable Capital Management Corp.'s special growth stock fund 3, which returned 13.71%; Bessemer Trust Co.'s emerging growth fund, 13.4%; and PW Trust Co.'s aggressive equity fund at 13.27%.

For the quarter, the median special equity fund returned 6.75%; the Standard & Poor's 500 Stock Index returned 6.3% and the Russell 2000 Index, 3.86%.

For the year ended June 30, the median PIPER commingled fund returned 10.82%, while the S&P returned 16.51% and the Russell 2000, 3.05%.

PIPER and PIPER + are compiled by Rogers, Casey & Associates, Darien, Conn.

Health-related issues also helped the growth commingled fund of Equitable Capital, New York, whose 33.04% return for the year placed it second in that time period, also.

According to Barry Feinstein, the fund's managing director, the $45 million account normally holds about 50 issues. He looks for companies undergoing fundamental change that will accelerate earnings growth.

"We try to get into the stock before the change is recognized by the market," he said.

The fund has big weightings in biotechnology firms, cellulars and companies that control health care costs.

Some stocks Mr. Feinstein said have performed well include **Shorewood Packaging Corp.** and **Pall Corp.**, which was sold earlier this year.

Health care stocks also were a main theme in the composite performance of Axe Houghton Management Inc.'s aggressive accounts, and helped them place first for the quarter among the 48 PIPER + funds run by investment managers.

The firm's accounts returned a composite 12.55% for the second quarter, while the median PIPER + manager returned 4.5%.

The accounts use bottom-up stock selection, focusing on companies with high return on equity, according to Porter Sutro, director of research and portfolio coordinator.

The accounts are overweighted in Canadian oil exploration firms and low on technology stocks, he said. Mr. Porter also is big on health care stocks, such as **Medical Imaging Centers of America Inc.**, **United Medicorp Inc.** and **Home Nutritional Services Inc.**

"We try to sell on first bad news," he said. "When we see a cockroach, we start to worry it might have a few companions in the cracks."

See **Health** *on page 32*

Stock picking gives the edge

By Margaret Price

Astute stock selection — and in some cases a boost from the partial rebound in the Tokyo market — aided many of the top international performers in Pensions & Investments' Performance Evaluation Reports for the second quarter.

But this year, what has proved fortuitous in one quarter has been wrong in another. Throughout 1990, world political and economic upheavals have made roller coasters out of major world markets. Such tumult has undermined short-term strategies and thrown uncertainty into expectations.

"It's been a tough time for investment managers," said Dan H. Blanks, president of Pictet International Management Ltd., London.

Pictet International accounts placed first and second for the three months ended June 30 in the PIPER + universe of 98 international funds run by investment managers. The $13 million Positive Value Unconstrained Account had a 14.1% return and the $14 million Average Risk Category V, or Judgmental Risk, account returned 13%.

In comparison, the Morgan Stanley Capital International Europe Australia Far East Index advanced 9.63% and the median PIPER + account returned 8.81% during the quarter.

The International Discovery Fund, a mutual fund managed by Rowe Price-Fleming International Inc., Baltimore, placed third with a 12.34% showing. For the year ended June 30, that fund bested all PIPER + competitors with a 47.15% return.

Among the 40 funds in the PIPER + universe of global funds, the $82.2 million global equity account of IDS International Inc., Minneapolis, won laurels for both the quarter and the year with returns of 10.98% and 32.99%, respectively.

For the quarter, the MSCI World Index returned 8.22%, the FT-Actuaries World Index advanced 7.38% and the median PIPER + global account posted a 7.94% return. For the year ended June 30, the returns were 7.67%, 34.14% and 19.39%, respectively.

The quarter's top performer among 39 funds in the PIPER universe of international commingled funds of banks and insurance companies was the $30 million international equity fund of New York Life Insurance Co. that is managed by Gamma Advisers Ltd., London, an independently managed joint venture of New York Life and Credit Commercial de France. The fund advanced 12.08% during the quarter.

The Gamma fund was followed by Wilmington Trust Co.'s international equity fund with 11.79% and Wellington Trust Co.'s Pacific Basin Portfolio at 11.6%.

For the year ended June 30, CIGNA Corp.'s international equity fund finished first with a 35.52% return, followed by NCNB

See **Picking** *on page 31*

PIPER + global funds
(periods ended June 30)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	10.98%	32.99%	18.35%	32.18%	24.60%
First quartile	9.58	23.36	11.78	25.89	22.83
Median	7.94	19.39	8.42	23.59	19.94
Third quartile	5.84	16.72	6.91	20.05	18.56
Lowest return	2.87	5.30	3.33	19.42	17.92
MSCI World	**8.22**	**7.67**	**6.59**	**22.17**	**17.73**
FTA World	**7.38**	**34.14**	**14.90**	**27.90**	**NA**

PIPER + International funds
(periods ended June 30)

	Quarter	1 yr.	3 yr.	5 yr.	10 yr.
Highest return	14.10%	47.15%	22.51%	61.67%	24.53%
First quartile	10.10	27.95	12.91	31.42	21.36
Median	8.81	21.00	9.70	30.17	20.43
Third quartile	7.35	15.33	6.08	27.80	17.47
Lowest return	0.17	−2.47	−0.52	15.64	12.68
FTA EuroPac	**8.51**	**39.47**	**16.97**	**37.10**	**NA**
MSCI EAFE	**9.63**	**3.52**	**5.84**	**28.97**	**19.66**

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Top two deciles PIPER + equity funds

3-month returns

	%
Combined Capital (Quality growth)	25.4
Cheswick Invst.	22.7
Mt. Auburn Mgmt.	17.4
General American (Closed end)	16.7
Capital Growth	16.6
Roger Engemann & Assoc.	16.5
Peregrine Capital	16.5
Provident Invst. Counsel	16.4
Harris Bretall Sullivan & Smith	16.4
Provident Invst. Counsel (Stellar)	16.3
Lehman Ark Mgmt. (Special sit.)	16.1
Scudder Stevens Clark (Sm. co.)	15.9
Northern Invst. Counsel	15.8
Jundt/Capen (Large cap.)	15.8
Dawson Samberg (Gro. Pequot)	15.8
Jundt/Capen (Small cap.)	15.6
Fred Alger Mgmt.	15.3
Janus Capital	15.2
Wall Street Assoc. (Sm. cap. gro.)	15.1
Presidio Mgmt. (Geary Partners)	15.0
Heartland Capital (Growth)	14.9
Friess Assoc.	14.6
Reynolds Capital	14.4
Pacific Century (Em. gro./sm.)	14.2
Peregrine Capital (Sm. cap.)	14.1
Tukman Capital	14.1
Nicholas Applegate (Growth)	14.0
Pacific Century (Growth)	13.8
Hellman, Jordan Mgmt.	13.8
Stein Roe Capital (H.Q. growth)	13.6
Lincoln Capital Mgmt.	13.6
Wilke/Thompson (Emerg. growth)	13.5
Lynch & Mayer (Growth)	13.5
Wilke/Thompson (Core growth)	13.3
Hellman, Jordan (Combustion)	13.2
Ashland Mgmt.	13.0
Fred Alger (Small cap.)	12.9
Beacon Invst.	12.9
J & W Seligman (Growth)	12.8
Pacific Invst.	12.8
Morgan Stanley (Emerg. gro.)	12.7
Pilgrim, Baxter, Greig (Sm. cap.)	12.6
Brown Capital (Rel. value)	12.5
Columbus Circle Investors	12.3
Union Capital (Cap. growth)	12.1
Denver Invst. (Med. sized)	12.0
J.M. Hartwell	12.0
Aetna Life (Lg. cap. growth)	11.9
William D. Witter	11.9
Investors Res. (20th cen. gro.)	11.8
Granahan Invst. (Explorer II)	11.8
Delta Financial (Growth)	11.7
Beekman Capital (Growth)	11.6
Turner Neill Invst.	11.6
Friess Assoc. (Brandywine)	11.6
Nelson, Benson & Zellmer	11.6
Scudder Stevens Clark (Qual.)	11.5
Chilmark Capital	11.3
Baring America Asset	11.2
Investors Res. (Select)	11.2
Cadence Capital (Small cap.)	11.0
Severn Assoc. (Fund I)	10.8
Wasatch Advisors	10.8
Miller/Howard Invst. (AMP)	10.7
S&P 500	6.3

1-year returns

	%
Dawson Samberg (Gro. Pequot)	70.6
Provident Invst. Counsel (Stellar)	44.8
Cheswick Invst.	41.4
Combined Capital (Quality gro.)	40.3
General American (Closed end)	38.7
Jundt/Capen (Large cap.)	37.3
Jundt/Capen (Small cap.)	37.2
Wilke/Thompson (Emerg. growth)	36.9
Harris Bretall Sullivan & Smith	35.9
Nicholas Applegate (Growth)	35.1
Provident Invst. Counsel	35.0
Morgan Stanley (Emerg. gro.)	35.0
Friess Assoc.	34.7
Fred Alger (Small cap.)	34.4
Lincoln Capital	34.1
Heartland Capital (Growth)	34.0
Presidio Mgmt. (Geary Partners)	33.9
Frontier Capital (Trad. growth)	33.3
Pilgrim, Baxter, Greig (Sm. cap.)	32.7
Lynch & Mayer (Growth)	32.6
Friess Assoc. (Brandywine)	31.7
Pacific Century (Em. gro./sm.)	31.5
Northern Invst. Counsel	31.4
Wall Street Assoc. (Sm. cap. gro.)	30.8
Lehman Ark Mgmt. (Sp. sit.)	30.6
Securities Res. (Putnam Voyager)	30.6
Wilke/Thompson (Core growth)	30.5
Scudder Stevens Clark (Sm. co.)	30.2
Peregrine Capital (Growth)	29.7
Securities Counsel (Sm. cap.)	29.6
Fred Alger	29.4
Roger Engemann & Assoc.	29.4
Mt. Auburn	29.1
IDS Equity Advisors	28.6
Miller/Howard Invst. (AMP)	28.6
Janus Capital	28.5
Dawson Samberg Capital	28.0
IDS Equity (Emerging growth)	27.8
Baring America Asset	27.8
Aetna Life (Lg. cap. growth)	27.7
Turner Neill Invst.	27.6
Oak Assoc. (Firestone)	27.5
Grananhan Invst. (Explorer II)	27.4
Hellman, Jordan Mgmt.	27.2
CMB Invst. Counselors	27.1
Stein Roe Capital (H.Q. growth)	27.1
Securities Res. (Kemper Summit)	27.1
Investors Res. (20th cen. growth)	27.1
Riggs Invst. (Inc./growth)	26.8
Investors Res. (20th cent. sel.)	26.7
Peregrine Capital (Sm. cap.)	26.6
Capital Growth Mgmt.	26.1
Beacon Invst.	26.0
Pacific Invst. Mgmt.	25.9
J & W Seligman (Growth)	25.6
Value Line (VLAM)	25.6
Scudder Stevens Clark (Qual.)	25.3
Reynolds Capital	25.2

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- **Rating the safety of money funds: accounting for lower credits and non-rated issues**
- **Risks associated with who holds securities — can quality be enhanced or reduced by custody arrangements?**
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Leylegian Invst.	25.1
Wasatch Advisors	24.9
Hellman, Jordan (Combustion)	24.9
Delta Financial (Growth)	24.7
Columbus Circle Investors	24.6
RCM Capital Mgmt.	24.6
S&P 500	**16.5**

5-year returns

	%
Wilshire Asset (Lg. co. growth)	29.8
C.H. Brown (Computer dir.)	28.7
Cadence Capital (Small cap.)	26.8
Quantitative Asset (E index)	26.8
Oak Assoc. (Firestone)	26.4
Combined Capital (Quality growth)	25.6
Cheswick Invst.	25.5
J.M. Hartwell	25.3
Jundt/Capen (Small cap.)	25.2
San Juan Asset (Yield)	24.3
Friess Assoc.	24.2
Pacific Century (Emerg. cap./sm.)	23.8
Beacon Invst.	23.8
Breau Capital Mgmt.	22.5
Turner Neill Invst.	22.1
Columbus Circle Investors	21.9
Cadénce Capital (Large cap.)	21.7
Jurika & Voyles	21.6
Leylegian Invst.	21.6
Lincoln Capital	21.5
Frontier Capital (Small cap.)	21.5
Argus Investors (Lg. cap. divers.)	21.5
Lynch & Mayer (Growth)	21.4
DeJarnette Invst.	21.4
Securities Res. (Dreyfus growth)	21.4
Tel Advisors of Virginia (Growth)	21.2
Investors Res. (20th cent. gro.)	21.2
Fayez Sarofim	21.2
Geewax Terker (H.Q. growth)	21.2
Harris Bretall Sullivan & Smith	21.1
Pennsylvania Invst. (Dyn. value)	21.0
Tukman Capital	20.9
Friess Assoc. (Brandywine)	20.9
Heartland Capital (Growth)	20.8
Institutional Capital	20.6
Reynolds Capital	20.6
Analytic Invst. (Option growth)	20.5
W.R. Lazard (Growth)	20.4
Roger Engemann & Assoc.	20.4
Jundt/Capen (Large cap.)	20.3
Red Oak Advisors	20.3
Nicholas Applegate (Growth)	20.2
Caldwell & Orkin	20.1
Dietche & Field Advisers	20.1
Capital Growth Mgmt.	20.1
Wall Street Assoc. (Sm. cap. gro.)	20.1
Waddell & Reed Asset	20.1
Ashland Mgmt.	20.1
Northern Invst. Counsel	20.0
Peregrine Capital (Sm. cap.)	20.0
MPT Assoc. (Divers. growth)	19.8
Putnam Cos. (OTC emerg. gro.)	19.8
Brinson Partners	19.7
Provident Invst. Counsel	19.7
Severn Assoc. (Fund I)	19.6
First Security Mgmt.	19.6
S&P 500	**17.3**

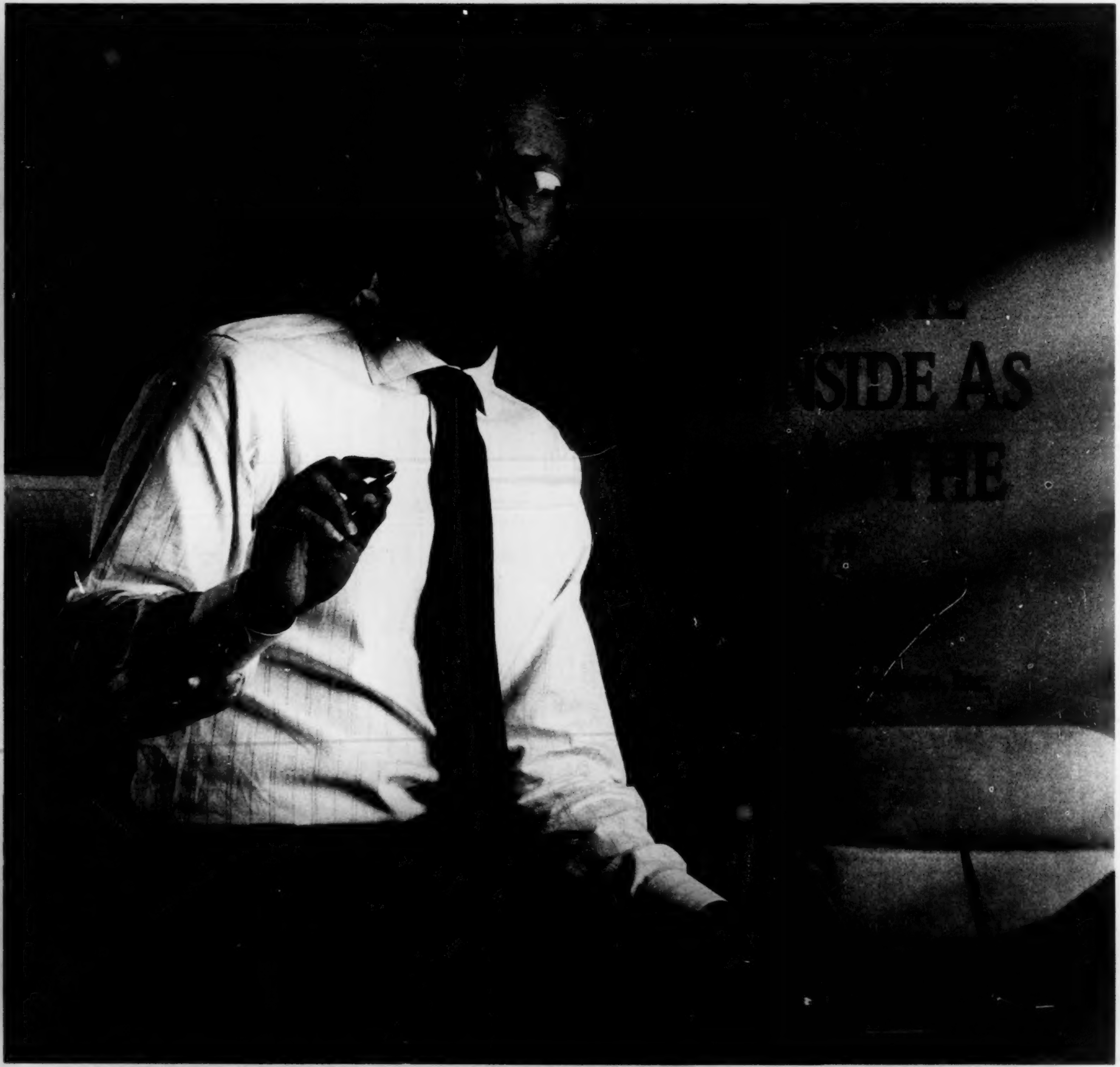
10-year returns

	%
C.H. Brown (Computer dir.)	29.82
Friess Assoc.	28.2
Nicholas Applegate (Emerg. gro.)	27.7
Wall Street Assoc. (Sm. cap. gro.)	27.2
Severn Assoc. (Fund I)	26.3
Friess Assoc. (Brandywine)	25.7
Cadence Capital (Large cap.)	25.3
Roger Engemann & Assoc.	25.1
Delta Financial (Growth)	24.9
San Juan Asset (Yield)	24.8
GAMCO Investors (ERISA)	24.4
Ashland Mgmt.	24.4
Capital Growth Mgmt.	24.2
Jundt/Capen (Small cap.)	23.8
Securities Res. (Dreyfus growth)	23.8
Caldwell & Orkin	23.7
Cedar Hill Assoc. (Value)	23.3
Hellman, Jordan Mgmt.	23.2
Columbus Circle Investors	23.1
Reynolds Capital Mgmt.	22.8
Wilshire Asset (Sm. comp. value)	22.7
Geewax Terker	22.6
Brandywine (Low p/e II/sm. cap.)	22.4
Geewax Terker (H.Q. growth)	22.4
First Security Mgmt.	22.1
Delta Financial (Value)	21.9
Oak Assoc. (Firestone)	21.9
Miller Anderson & Sherrerd	21.8
Sterling Capital	21.8
Investors Res. (20th cen. sel.)	21.8
Geo Capital (Small cap.)	21.5
Eagle Asset Mgmt.	21.3
Chase Investors (Sm. cap. value)	21.2
Wilshire Asset (Lg. co. growth)	21.2
Tukman Capital	21.2
S&P 500	**16.93**

Top two deciles PIPER + fixed-income funds

3-month returns

	%
Huff Asset Mgmt.	6.4
Income Research (Long duration)	4.8
Loomis, Sayles	4.7
Peters, Gamm, West & Vincent	4.4
Denver Invst. (Long term)	4.4
Security Capital (Long term)	4.3
Loomis, Sayles (Invst. grade)	4.3
Turner Neill Invst. (Core)	4.2
Criterion Invst.	4.2
Kemper Asset Mgmt. (Plus)	4.2
Discount Corp. of New York	4.2
STW Fixed Income (Long comp.)	4.1
Miller Anderson & Sherrerd	4.0
Investment Advisors (And cash)	4.0
PRIMA (PRIMA X)	4.0
Standish, Ayer & Wood (Act. core)	3.9



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Lazard Freres Asset	3.9
Standish, Ayer & Wood (SA free)	3.9
Harris Invst. (Active)	3.8
David L. Babson	3.8
Atlantic Port. Analytics (A)	3.8
Munder Capital (Active)	3.8
Mass Financial (Active)	3.8
RCM Capital Mgmt.	3.8
Scudder Stevens & Clark (Act. val.)	3.8
Mellon Capital (Cap. index)	3.7
Brinson Partners (U.S.)	3.7
J&W Seligman	3.7
Pacific Invst.	3.7
Pacific Invst. (SA Free)	3.7
Oppenheimer Capital (Value)	3.7
Patterson Capital (Immed.)	3.7
IDS Fixed Income	3.7
Boston Co. Institutional	3.7
SLH G/C	**3.6**

1-year returns

	%
Philadelphia Invst.	10.5
Davidson, Garrard & Goode	9.9
Atlantic Port. Analytics (A)	9.9
Hoisington Invst.	9.5
STW Fixed Income (Short)	9.4
Patterson Capital (Immed.)	9.4
McKee Invst.	9.4
Reimer & Koger (Stable value)	9.3
Palm Beach Capital	9.3
Chemical Invst. (Money mkt.)	9.2
Pacific Invst. (Low duration)	9.1
Gabelli O'Connor (Act. cash mgmt.)	9.1
Analytic Invst. (Plus)	9.1
Cumberland Advisors (Plus cash)	9.0
Legg Mason Capital (Active)	9.0
Standish, Ayer & Wood (Con. risk)	9.0
Longfellow Invst. (Short. dur.)	9.0
Chandler & Chambless (Short)	8.9
Northern Invst. (Taxable)	8.9
Merganser Capital	8.8
Standish, Ayer & Wood (Act. core)	8.8
Analytic Invst. (Enhanced cash)	8.8
Marinvest	8.7
RCM Capital (Short term)	8.7
Peregrine Capital	8.7
Income Research (Enhanced cash)	8.7
Standish, Ayer & Wood (SA free)	8.6
Chase Invst. Counsel	8.6
Harris Invst. (Active)	8.6
Shelby County Government	8.5
NSR Asset Mgmt.	8.5
Brundage, Story and Rose	8.5
Criterion Invst. (Ltd. 2-5)	8.4
Patterson Capital (Ltd. mat.)	8.4
SLH G/C	**7.1**

5-year returns

	%
Bridgewater Asset (Act. dur.)	15.9
Huff Asset Mgmt.	14.3
McKee Invst.	14.1
STW Fixed Income	13.8
Hoisington Invst.	13.5
Waddell & Reed Asset	12.6
Ferguson & Wellman (Int. rate)	12.4
Denver Invst. (Long term)	12.4
Pacific Invst.	12.2
Loomis, Sayles	12.1
PRIMA (PRIMA X)	12.1
Signet Asset (Enhanced)	12.0
Washington Square (Broad)	11.9
Union Capital (Long term)	11.9
Standish, Ayer & Wood (Act. core)	11.8
Smith Affiliated Capital	11.8
Merrill Lynch (Int. rate anticip.)	11.7
Western Asset Mgmt. (Long term)	11.6
Wright Investor's Service	11.6
Analytic Invst.	11.4
J&W Seligman	11.4
Patterson Capital (Immed.)	11.4
Kemper Asset (Plus)	11.4
Harris Invst. (Active)	11.4
NWQ Invst. Mgmt.	11.4
Loomis, Sayles (Invst. grade)	11.4
SLH G/C	**10.3**

10-year returns

	%
Patterson Capital (Immed.)	16.9
Scheetz, Smith & Co.	15.0
Greenwich Asset Mgmt.	14.9
Smith Affiliated	14.8
STW Fixed Income (Long)	14.5
PRIMA (PRIMA X)	14.2
Western Asset (Long term)	14.2
Delta Financial (Quant)	13.8
Investment Advisors (And cash)	13.7
Loomis, Sayles	13.7
Wilmington Trust (Bench. 7 yr.)	13.7
Winrich Capital Mgmt.	13.7
Peters, Gamm, West & Vincent	13.6
Hoisington Invst.	13.5
Standish, Ayer & Wood (Act. core)	13.4
PRIMA (PRIMA VII)	13.4
Denver Invst. (Strat.)	13.3
SLH G/C	**11.6**

Top two deciles PIPER + balanced/TAA funds

3-month returns

	%
Provident Invst.	13.0
Cheswick Invst.	12.5
Harris Bretall Sullivan (Growth)	11.1
Beacon Invst.	10.0
Caldwell & Orkin	9.6
Brown Capital (Rel. value)	9.4
J&W Seligman	9.2
Chase Invst. Counsel	9.2
Turner Neill Invst. (Core)	9.0
Lincoln Capital	9.0
Fred Alger Mgmt.	8.9
Baring America Asset	8.7

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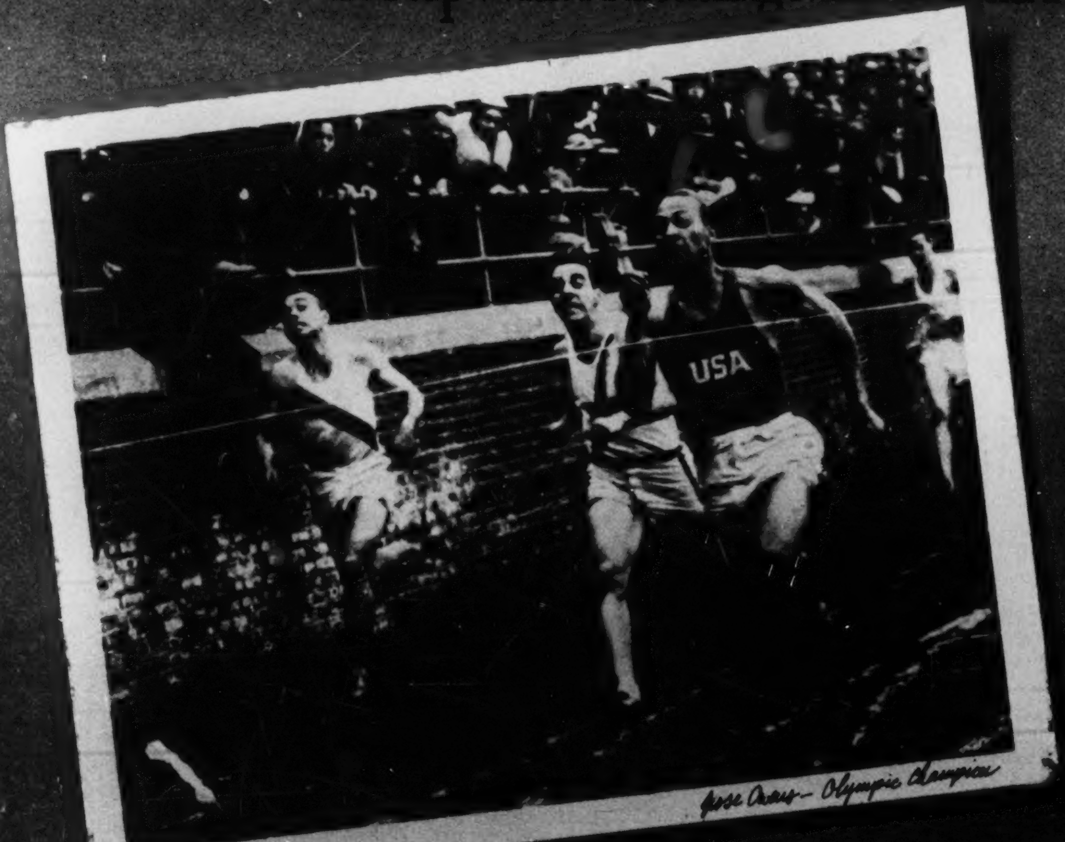

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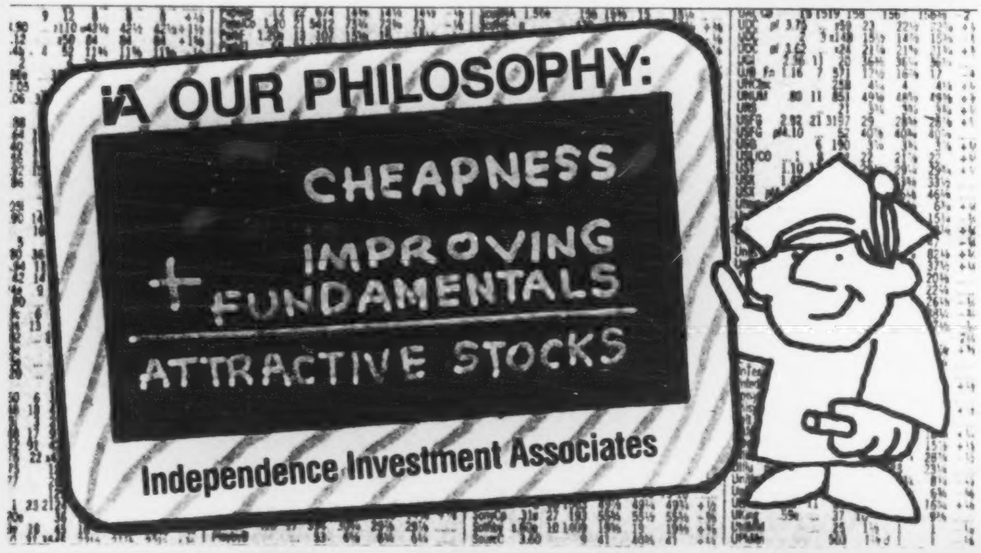


Value Line	8.1
Columbus Circle Investors	7.9
Denver Invst. Advisors	7.8
Beacon Capital (TAA)	7.7
Palm Beach Capital	7.7
Frontier Capital	7.5
Chancellor Capital (Stockshift 200)	7.4
Investment Advisors	7.4
Chancellor Capital (Stockshift 150)	7.4
Miller Anderson Sherrerd	7.3
Criterion Invst.	7.0
Investment Counselors	6.9
Northern Capital (Asset Alloc.)	6.9

1-year returns

	%
Provident Invst.	25.7
Harris Bretall Sullivan (Growth)	24.6
Cheswick Invst.	21.9
Baring America Asset	21.1
Lincoln Capital	21.0
Frontier Capital	20.6
Turner Neill Invst. (Core)	20.3
Oxford Capital	20.3
J&W Seligman	19.8
Chase Invst.	18.9
IDS Equity/Fixed Income	18.8
Fred Alger Mgmt.	18.6
IDS Trust (50/80)	18.4
Caldwell & Orkin	17.8
Columbus Circle Investors	17.1
Value Line	16.5
Palm Beach Capital	16.5
Bankers Trust (TAA act. mgd.)	16.0
Beacon Invst.	15.9
Rainier Invst.	15.5
Institutional Capital	15.4
Starbuck, Tisdale & Assoc.	15.1
Denver Invst. Advisors	14.8
IDS Trust (35/65)	14.8
Investment Advisors	14.6

5-year returns

	%
Oxford Capital	25.1
Chancellor Capital (Stockshift 200)	23.6
First Quandrant (Tactical)	21.0
Institutional Capital	19.7
TSA Capital (Strat. TAA)	18.8
Turner Neill Invst. (Core)	18.6
Bankers Trust (TAA act. mgd.)	18.5
Investment Counselors	18.0
Provident Invst.	17.9
BRS Capital (TAA)	17.8
Jurika & Voyles	17.7
Columbus Circle Investors	17.6
Lincoln Capital	17.4
Beacon Capital (TAA)	17.1
Chancellor Capital (Assetshift 65)	16.9
Mellon Equity (Quant)	16.9
Caldwell & Orkin	16.8
Brinson Partners (Global)	16.8
TSA Capital (50/50)	16.5
IDS Equity/Fixed Income	16.3
IDS Trust (50/80)	16.3
JP Morgan Invst. (TAA)	16.3

10-year returns

	%
BRS Capital (TAA)	23.7
First Quadrant (Tactical)	23.2
Mellon Capital (3-way asset alloc.)	19.9
TSA Capital (Strat. TAA)	19.8
Caldwell & Orkin	19.5
Chancellor Capital (Assetshift 65)	19.4
Provident Invst.	19.3
First Bank of Milwaukee	19.0
Columbus Circle	18.8
Davenport & Co. of Va.	18.6
Investment Counselors	18.4
JP Morgan (TAA)	18.3
Wells Fargo Invst. (Three-way)	18.0
Fidelity Mgmt.	17.8

Top two deciles PIPER + special equity funds

3-month returns

	%
Axe Houghton (Emerg. growth)	12.6
Brinson Partners (Post venture)	12.5
RTA Mgmt. (Hedge)	12.2
Pacific Century (Aggressive)	11.7
Froley, Revy Invst.	7.6
Cramer Rosenthal McGlynn	7.3
S&P 500	**6.3**
Russell 2000	**3.9**

1-year returns

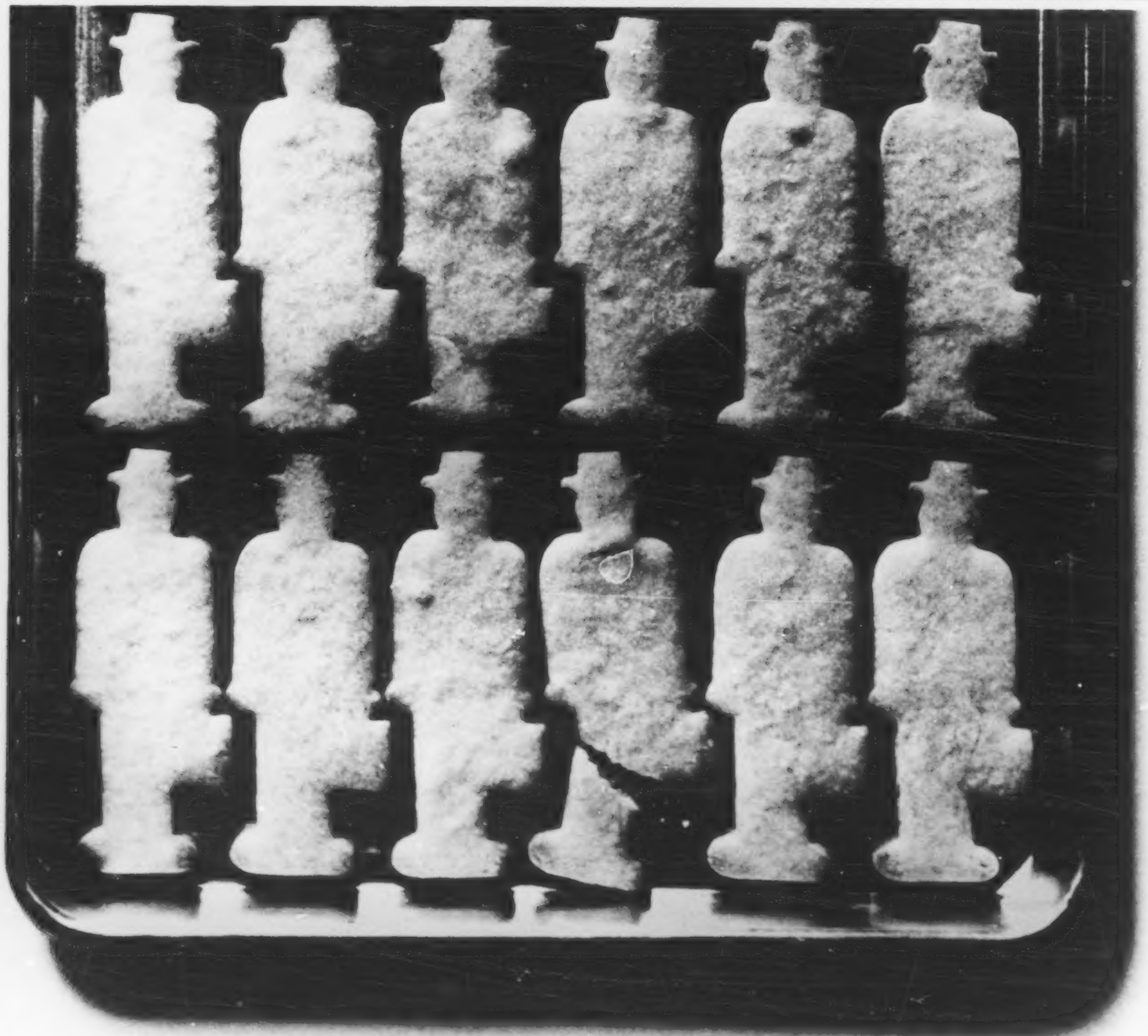
	%
Feshbach Bros. (Southgate)	44.4
RTA Mgmt. (Hedge)	43.6
Axe Houghton (Emerg. growth)	28.0
MPT Assoc. (Agg. growth)	26.0
Pacific Century (Aggressive)	19.1
Brinson Partners (Post venture)	18.1
S&P 500	**16.5**
Russell 2000	**3.0**

5-year returns

	%
Feshbach Bros. (Southgate)	32.8
Cramer Rosenthal McGlynn	17.8
S&P 500	**17.3**
W.H. Reaves (Utility/energy)	16.7
Axe Houghton (Emerg. growth)	15.7
MPT Assoc. (Agg. growth)	15.7
Russell 2000	**9.6**

10-year returns

	%
Cramer Rosenthal McGlynn	22.6
IDC Portfolio (Utility)	17.5
S&P 500	**16.9**
Axe Houghton (Emerg. growth)	15.4
Russell 2000	**14.2**



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Top two deciles PIPER + global equity funds

3-month returns

	%
S Int'l	11.0
dinburgh-Wilmington Int'l	10.3
ewart, Ivory (RCB Stewart)	10.3
redit Suisse Asset	10.2
enderson Admin.	10.1
SCI World	**8.2**
TA World	**7.4**

1-year returns

	%
TA World	**34.1**
S Int'l	33.0
redit Suisse Asset	28.9
ewart, Ivory (RCB Stewart)	24.6
urgess Capital	23.9
T. Capital	23.6
SCI World	**7.7**

5-year returns

	%
orldInvest	32.2
TA World	**27.9**
ewart, Ivory (RCB Stewart)	26.7
redit Suisse Asset	26.2
S Int'l	26.1
SCI World	**22.2**

10-year returns

	%
urgess Capital	24.6
SCI World	**17.7**

Top two deciles PIPER + international equity funds

3-month returns

	%
ctet Int'l (Pos. val. unconstr.)	14.1
ctet Int'l (Avg. risk)	13.0
owe Price-Fleming (Discovery)	12.3
llon, Read Int'l (EAFE)	11.9
acific Financial	11.4
tnam Cos.	10.8
CB Int'l	10.6
edit Suisse Asset (EAFE)	10.6
enderson Admin. (EAFE)	10.5
oatmen's Trust (W)	10.5
einwort Benson (ERISA)	10.4
ellington Trust (Emerging)	10.3
licorp Invst.	10.2
SCI EAFE	**9.6**
TA Europe & Pacific	**8.5**

1-year returns

	%
owe Price-Fleming (Discovery)	47.2
TA Europe & Pacific	**39.5**
aillie Gifford (NCNB Texas)	36.3
organ Stanley (S. Butt/EAFE)	35.4
llon, Read Int'l (EAFE)	31.1
ellington Trust (Emerging)	31.1
CB Int'l	31.0
zard Freres	30.4
tnam Cos.	30.1
mpleton Invst.	29.4
delity Mgmt. (Overseas)	29.1
obe Finlay (EAFE)	28.9
antham Mayo v. Otterloo	28.6
SCI EAFE	**3.5**

5-year returns

	%
ctet Int'l (Pos. val. unconstr.)	61.7
organ Stanley (S. Butt/EAFE)	37.5
TA Europe & Pacific	**37.1**
orldInvest (IPEF)	34.4
echsle Advisors (Core plus)	33.8
ovident Capital (Low p/e)	33.1
obe Finlay (EAFE)	32.4
udder Stevens & Clark	32.2
) Int'l	31.9
antham Mayo v. Otterloo	31.6
SCI EAFE	**29.0**

10-year returns

	%
cific Financial	24.5
chsle Int'l (Core plus)	23.5
T. Capital (EAFE)	22.0
SCI EAFE	**19.7**

Top two deciles PIPER commingled equity funds

3-month returns

	%
Shearson Trust (EF7), Del.	17.9
The New England (Sep. cap. gro.)	14.5
Commerce Bank, Mo.	14.4
IDS Trust (Core growth), Minn.	14.2
Chancellor (Select growth)	14.1
Chancellor (Growth)	13.8
Bank of Delaware (VIP)	13.0
Chancellor (Styleshift)	12.7
Princeton Bank, N.J.	12.6
Commercial Cap. (Sp. gro.), Ark.	12.5
First Nat'l of Tulsa, Okla.	12.4
Lincoln Nat'l (Select), Ind.	12.1
Aetna Life (SA-2), Conn.	11.9
American Nat'l, Ind.	11.9
First Trust, Colo.	11.6
Commercial Cap., Ark.	11.3
Mark Twain Bank, Mo.	11.3
Sanwa Bank (D), Calif.	11.2

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New York Life (S.A. 1)	11.2
First Security Nat'l (D), Ky.	11.1
Fifth Third Bank-Toledo, Ohio	11.1
Southeast Bank, Fla.	11.0
First Wisconsin Asset (Growth A)	10.9
Bank One Wisconsin (Growth)	10.7
Metropolitan Life (S.A. 40), N.Y.	10.7
Manufacturer Affil. (Growth), Ill.	10.5
Manufacturers Detroit (E)	10.5
Pacific Financial (Cap. app.)	10.5
Merus Capital (Sp. gro.), Calif.	10.5
Sovran Bank/Cen. South (Gro.)	10.4
Chancellor (Indexplus)	10.3
First of America (Sm. cap. value)	10.3
First Illinois (Corp.)	10.2
American Nat'l (Growth), Ind.	10.1
Northern States, Ill.	10.1
Wellington Trust (Div. gro.), Mass.	10.0
Mercantile Bank-Joplin (Gro. C)	10.0
FirsTier Bank-Omaha, Neb.	10.0
NCNB Corp., N.C.	9.8
Sentry Equity (S.A. B), Wis.	9.7
CoreStates (Growth), Pa.	9.7
Sun Bank, Fla.	9.3
Chancellor (Multifact)	9.3
First Illinois (Personal)	9.3
Southtrust Bank, Ala.	9.2
Merchants Nat'l (I), Ind.	9.2
Merchants Nat'l (2), Ind.	9.1
NCNB Corp. (Growth), N.C.	9.1
Penn Mutual (S.A. A), Pa.	9.1
Sentry Equity (S.A. A), Wis.	9.0
State Street Bank, Mass.	9.0
First Kentucky	9.0
The Phoenix (Growth S), Conn.	9.0
Citizens Fidelity (E), Ky.	9.0
Texas Commerce (Growth)	8.9
S&P 500	**6.3**

1-year returns

	%
Shearson Trust (EF7), Del.	41.0
Princeton Bank, N.J.	37.8
Chancellor (Select growth)	36.3
Commercial Cap. (Sp. gro.), Ark.	33.2
Chancellor (Styleshift)	32.7
Lincoln Nat'l (Select), Ind.	31.2
IDS Trust (Core growth), Minn.	30.9
First of America (Sm. cap. value)	29.6
Bank One Wisconsin (Growth)	29.3
Chancellor (Growth)	28.7
Aetna Life (SA-2), Conn.	27.9
Mark Twain Bank, Mo.	27.0
Commerce Bank, Mo.	26.6
First City Texas-Houston (A/1)	25.7
Riggs Nat'l Bank, D.C.	25.5
Southeast Bank, Fla.	24.8
First Kentucky Trust	24.6
Merchants Nat'l (I), Ind.	24.5
First Trust, Colo.	24.5
Mercantile Bank-Joplin (Gro. C)	24.3
Summit Trust, N.J.	24.2
Sun Bank, Fla.	24.2
Bank of Delaware (VIP)	24.2
The New England (Sep. cap. gro.)	23.9
The Phoenix (Growth S), Conn.	23.8
CoreStates (Growth), Pa.	23.7
Chancellor (Indexplus)	23.7
Hibernia Nat'l (A), La.	23.6
First Wisconsin Asset (Growth A)	23.5
IDS Trust, Minn.	23.2
Merchants Nat'l (2), Ind.	23.2
State Street Bank, Mass.	23.1
PW Trust (Growth/value), N.J.	22.9
American Nat'l Bank, Ind.	22.8
State Street Bank (Matrix syn.)	22.7
John Hancock (Divers. 1K), Mass.	22.6
Chicago Title & Trust	22.5
New York Life (S.A. 1)	22.5
NCNB Corp., N.C.	22.4
Southtrust Bank, Ala.	22.2
Beverly Trust, Ill.	22.1
Planters Nat'l (Growth), N.C.	22.1
Commercial Cap., Ark.	22.0
Wheeling Dollar Bank, W.Va.	21.9
Great West (VAAA), Manitoba	21.7
First Security Nat'l (D), Ky.	21.5
BancOkalahoma Trust	21.4
Assoc. Manitowoc, Wis.	21.4
Metropolitan Life (SA 40)	21.4
NBD Trust, Ill.	21.3
Wheeling Dollar Bank (B), W.Va.	21.2
FirsTier Bank-Lincoln, Neb.	21.1
Mercantile Bank, Mo.	21.1
Mutual of New York (Growth)	20.7
S&P 500	**16.5**

5-year returns

	%
Sun Bank, Fla.	24.2

Top PIPER equity funds by size

1-year returns

Over $100 million

	%
Chancellor (Growth), N.Y.	28.7
Aetna Life (SA-2), Conn.	27.9
Sun Bank, Fla.	24.2
The New England (Sep. gro.)	23.9
The Phoenix (Gro. S), Conn.	23.8
CoreStates (Growth), Pa.	23.7
First Wisconsin Asset (Gro. A)	23.5
IDS Trust, Minn.	23.2
John Hancock (Div. 1K)	22.6
Chicago Title & Trust	22.5

$50 million to $100 million

	%
Chancellor (Styleshift), N.Y.	32.7
Lincoln Nat'l (Select), Ind.	31.2
First of America (Sm. cap. val.)	29.6
Commerce Bank, Mo.	26.6
Chancellor (Indexplus), N.Y.	23.7
Hibernia Nat'l (A), La.	23.6
State Street Bank, Mass.	23.1
State Street Bank (Mat. syn.)	22.7
BancOklahoma Trust	21.4
Connecticut Mutual	19.7

$10 million to $50 million

	%
Princeton Bank, N.J.	37.8
Chancellor (Sel. growth)	36.3
Bank One Wisconsin (Growth)	29.3
Mark Twain Bank, Mo.	27.0
First City Texas/Houston (A/1)	25.7
Riggs Nat'l Bank, D.C.	25.5
Southeast Bank, Fla.	24.8
First Kentucky Trust	24.6
Merchants Nat'l (I), Ind.	24.5
First Trust, Colo.	24.5

Under $10 million

	%
Shearson Trust (EF7), Del.	41.0
Commercial Cap. (Sp. gro.)	33.2
IDS Trust (Core growth), Minn.	30.9
Mercantile Bk.-Joplin (Gro. C)	24.3
Merchants Nat'l (2), Ind.	23.2
PW Trust (Growth/value), N.J.	22.9
American Nat'l Bank, Ind.	22.8
Planters Nat'l (Growth), N.C.	22.1
Wheeling Dollar Bank, W. Va.	21.9
Great West (VAAA), Manitoba	21.7

10-year returns

Over $100 million

	%
Sun Bank, Fla.	25.4
The New England (Sep. gro.)	20.0
First Union Nat'l, N.C.	20.0
Provident Mutual (S.A. 1), Pa.	19.8
Manufacturers Life, Ontario	19.5
Manufacturer Affil. (Gro.), Ill.	19.4
Manufacturers Detroit (E)	19.4
Merus Capital (Inc.), Calif.	19.4
Chancellor (Value), N.Y.	19.0
Union Labor Life (S.A. A), D.C.	18.7

$50 million to $100 million

	%
Connecticut Mutual	19.7
U.S. Nat'l Bank, Texas	19.4
State Street Bank, Mass.	19.4
First Nat'l of Omaha (D), Neb.	18.6
Assoc. Bank-Neenah, Wis.	18.5
Merus Capital (Gro. plus)	18.4
Colorado Nat'l Bank	18.2
Dominion Capital (Corp.), Va.	17.6
Dauphin Deposit (Corp.), Pa.	17.6
AmSouth, Ala.	17.4

$10 million to $50 million

	%
Pacific Financial (Cap. app.)	25.2
First Fidelity (Sel. val.), N.J.	20.6
First Nat'l-Amarillo, Texas	20.4
Pacific Financial (Div. low p/e)	19.4
First Interstate of Oklahoma	19.1
Wheeling Dollar (B), W. Va.	19.0
United Capital, Colo.	18.9
Lake Shore Nat'l, Ill.	18.8
Guardian Ins. (V.A. 1), N.Y.	18.7
First Trust, Colo.	18.6

Under $10 million

	%
First N.H. Invst. (A)	19.7
Assoc. Manitowoc, Wis.	18.0
Wheeling Dollar Bank, W. Va.	17.9
Merchants Nat'l (2), Ind.	17.4
Pioneer Bank, Ill.	16.8
Second Nat'l Bank (Gro.), Ohio	16.7
Great West (VAAA), Manitoba	15.8
Planters Nat'l (Growth), N.C.	15.2

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Shearson Trust (EF7), Del.	23.8
Chancellor (Select growth)	23.5
Bank One-Indianapolis (L)	22.6
State Street Bank (Matrix syn.)	21.7
Pacific Financial (Cap. apprec.)	21.6
IDS Trust (Core growth), Minn.	21.4
Pacific Financial (Income), Calif.	20.7
South Carolina Nat'l	20.3
State Bank (C), Ohio	20.3
State Street Bank, Mass.	20.0
First Nat'l-Amarillo, Texas	19.9
Assoc. Manitowoc, Wis.	19.4
John Hancock (Divers. 1K), Mass	19.2
Southtrust Bank, Ala.	19.1
Assoc. Bank-Neenah, Wis.	19.1
First Illinois (Corp.)	19.0
Bank One Wisconsin (Growth)	19.0
Chancellor (Indexplus)	19.0
Wheeling Dollar Bank (B), W. Va.	19.0
NCNB Corp., N.C.	18.8
Bank of New York	18.8
Chancellor (Growth)	18.5
IDS Trust, Minn.	18.5
First Illinois (Personal)	18.5
FirsTier Bank-Omaha, Neb.	18.4
Connecticut Mutual	18.4
Valley Nat'l (I), Ariz.	18.4
Meridian, Pa.	18.3
Assoc. Bank-Neenah (I), Wis.	18.3
Chase-CMB (Stk. & futures), N.Y.	18.1
First Fidelity, N.J.	17.9
Bank One Wisconsin (Disc.)	17.9
First Security Nat'l (D), Ky.	17.8
Wellington Trust (Divers. growth)	17.8
CREF, N.Y.	17.7
Shearson Trust (EF4), Del.	17.7
FirsTier Bank-Lincoln, Neb.	17.6
Mercantile Bank-Joplin (Gro. C)	17.6
Shawmut Bank, Mass.	17.6
First Fidelity (Sel. value), N.J.	17.5
Travelers (S.A. 500), Conn.	17.5
Summit Tru[illegible] J.	17.5
Markston Invst., N.Y.	17.5
The Phoenix, Conn.	17.4
Bankers Trust (Index), N.Y.	17.4
S&P 500	**17.3**

10-year returns

	%
Sun Bank, Fla.	25.4
Pacific Financial (Cap. app.)	25.2
First Fidelity (Select value), N.J.	20.6
First Nat'l-Amarillo, Texas	20.4
The New England (Sep. cap. gro.)	20.0
First Union Nat'l, N.C.	20.0
Provident Mutual (S.A. 1), Pa.	19.8
First NH Invst. (A)	19.7
Connecticut Mutual	19.7
Manufacturers Life, Ontario	19.5
Manufacturer Affil. (Growth), Ill.	19.4
Manufacturers Detroit (E)	19.4
Pacific Financial (Divers. low p/e)	19.4
U.S. Nat'l Bank, Texas	19.4
Merus Capital (Income), Calif.	19.4
State Street Bank, Mass.	19.4
First Interstate of Oklahoma	19.1
Chancellor (Value)	19.0
Wheeling Dollar Bank (B), W. Va.	19.0
United Capital, Colo.	18.9
Lake Shore Nat'l, Ill.	18.8
Union Labor Life (S.A. A), D.C.	18.7
Guardian Insurance (V.A. 1), N.Y.	18.7
Markston Invst., N.Y.	18.6
First of Omaha (D), Neb.	18.6
First Trust, Colo.	18.6
Assoc. Bank-Neenah, Wis.	18.5
MTrust (Growth), Texas	18.4
Merus Capital (Growth plus), Calif.	18.4
Aliac (Variable), Conn.	18.3
First Security Nat'l (D), Ky.	18.3
Colorado Nat'l Bank	18.2
John Hancock (Divers. 1K), Mass.	18.1
Bank of New York	18.0
S&P 500	**16.9**

Top two deciles PIPER commingled fixed-income funds

3-month returns

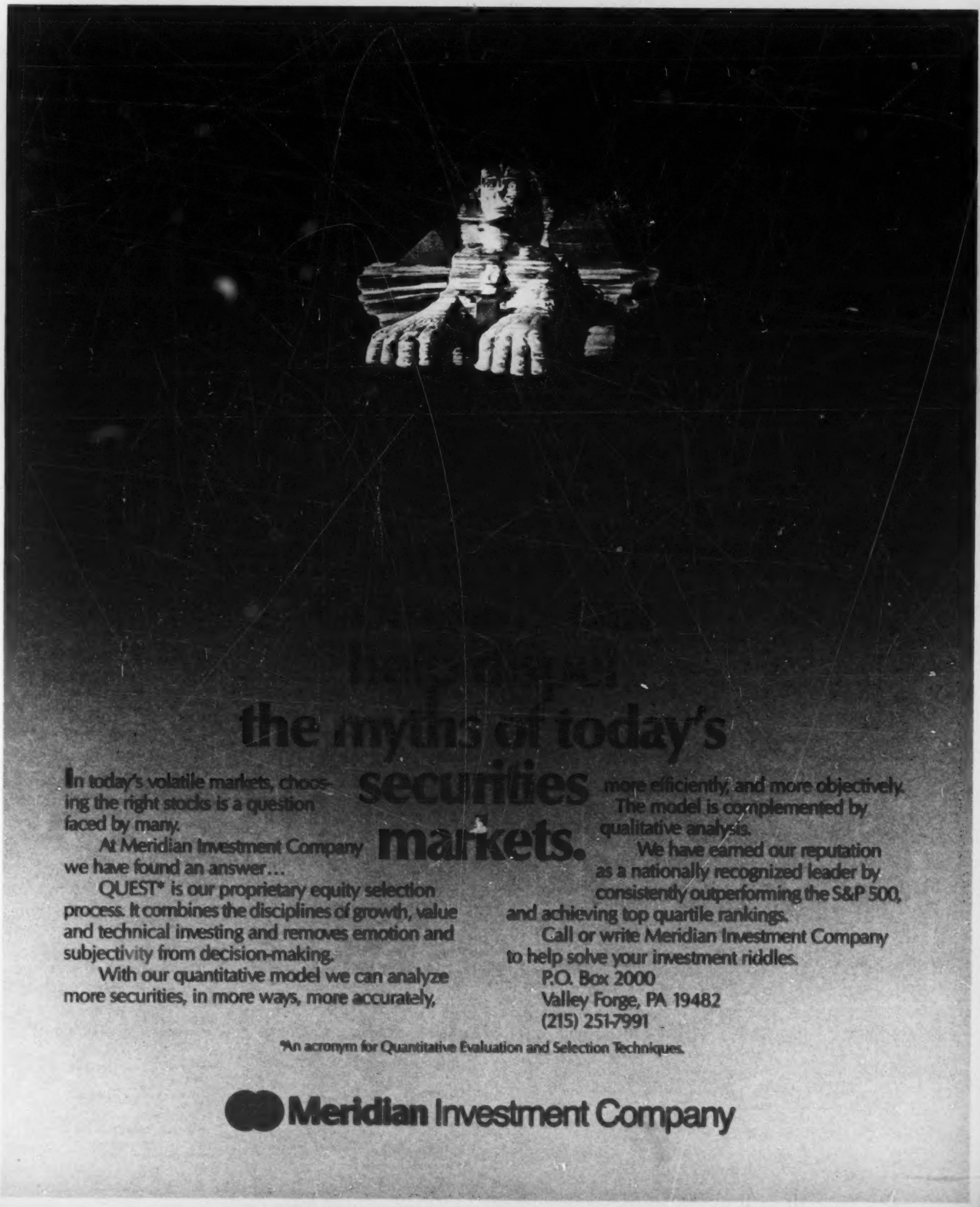
	%
Boatmen's Trust (F), Mo.	5.3
Mercantile Bank-Joplin (F), Mo.	4.9
First Variable Life (H.Q.), Ark.	4.9
Second Nat'l Bank, Ohio	4.8
Connecticut Mutual (Convert.)	4.4
Life of Virginia	4.4
First Union Nat'l (1), N.C.	4.3
Prudential Realty (Long), N.J.	4.3
Transamerica Life (SA T-2), Calif.	4.3
Keystone Invst. (Convert.), Pa.	4.3
Lincoln Nat'l Invst. (Long), Ind.	4.3
AmSouth (Bond), Ala.	4.2
Trust Co./West (High yield), Calif.	4.2
Chancellor (Mtg. sec.), N.Y.	4.1
Chase-CMB (Long term), N.Y.	4.1
John Hancock (1D), Mass.	4.1
U.S. Trust Co. of New York	3.9
Metropolitan Life (SA 41), N.Y.	3.9
Chase-CMB (Sec. mtg.), N.Y.	3.9
Crown Life (U.S.), Ontario	3.9
NCNB Corp. (Long term), N.C.	3.8
First Interstate Oregon	3.8
Ameritrust (GNMA), Ohio	3.8
Connecticut Bank	3.8
Harris Trust, Ill.	3.8
The Principal, Iowa	3.7
Bankers Trust (Mtg. pass.), N.Y.	3.7
Mercantile Bank, Mo.	3.7
First Tennessee Invst.	3.7
Morgan Guaranty, N.Y.	3.7
BancOklahoma Trust	3.7
Bankers Trust (A), N.Y.	3.7
New York Life (SA 8)	3.7
Massachusetts Mutual	3.7
Bank of New York	3.6
First Asset Mgmt. (II), Minn.	3.6
Dominion Trust (Rel. value), Va.	3.6
Aetna Life (Inc. shares), Conn.	3.6
SLH G/C	**3.6**
Travelers Cos. (SA P), Conn.	3.6
Aetna Life (SA 76), Conn.	3.6
Wells Fargo (Index), Calif.	3.6
NCNB Corp., N.C.	3.6
IDS Trust (A), Minn.	3.6
Shawmut Bank, Mass.	3.6
Chancellor, N.Y.	3.6
Union Labor Life (SA G), D.C.	3.6
Riggs Nat'l Bank, D.C.	3.5
Connecticut Nat'l Bank	3.5
Mercantile Safe, Md.	3.5
Travelers Cos. (Index), Conn.	3.5
Bank of New York	3.5

1-year returns

	%
Mercantile Bank-Joplin (F), Mo.	17.1
Sanwa Bank (C), Calif.	10.6
General American (SA 6), Mo.	10.5
First Florida Bank	10.5
SW Nat'l Bank of Pa.	10.0
Chancellor (Mtg. sec.), N.Y.	10.0
Jefferson Trust, Ill.	9.6
Bankers Trust (Mtg. pass.), N.Y.	9.5
Mercantile Safe (Inter.), Md.	9.5
MTrust, Texas	9.3
Chancellor (Inter.), N.Y.	9.3
Dominion Trust (Stable cap. B)	9.2
First Nat'l of Maryland	9.2
Second Nat'l Bank, Ohio	9.1
IDS Trust (GIC), Minn.	9.1
First Nat'l-Amarillo (Inter.), Texas	9.0
Chase-CMB (Sec. mtg.), N.Y.	9.0
IDS Trust (Cash mgmt.), Minn.	9.0
Dauphin Deposit (Short term), Pa.	8.9
Hawaiian Trust (Defensive)	8.9
Wellington Trust (Inter.), Mass.	8.9
Ameritrust (GNMA), Ohio	8.9
Aetna Life (Inc. shares), Conn.	8.9
Bankers Trust (B), N.Y.	8.8
Signet Trust (Stable value), Va.	8.8
AmSouth (Ltd. mat.), Ala.	8.8
Central Fidelity (Short term), Va.	8.8
Central Fidelity (Cap. pres.), Va.	8.8
Bankers Trust (Govt./agency)	8.8
Chase-CMB (Short-inter.), N.Y.	8.7
First Variable Life (H.Q.), Ark.	8.7
Prudential Realty (VCA 8), N.J.	8.6
Wheeling Dollar Bank, W. Va.	8.6
Commerce Bank (Cap. pres.), Mo.	8.6
Assoc. Kellogg, Wis.	8.6
Bank One Wisconsin (Inter.)	8.6
Union Labor Life (SA G), D.C.	8.6
Continental Capital (Inter.), Ill.	8.6
Connecticut Mutual (Convert.)	8.6
Marine Midland, N.Y.	8.5
Ameritrust (Reserve), Ohio	8.5
The Principal, Iowa	8.5
Gary Wheaton Bank, Ill.	8.4
Crown Life (U.S.), Ontario	8.4
Valley Fidelity, Tenn.	8.4
First NH Invst. (B)	8.4
Old Second Nat'l (HR 10), Ill.	8.4
Home Life, N.Y.	8.4
First Alabama Bank	8.4
SLH G/C	**7.1**

5-year returns

	%
Meridan, Pa.	13.5
Transamerica Life (SA T-2), Calif.	13.0
Equitable Capital (No. 5), N.Y.	13.0
Boatmen's Trust (F), Mo.	12.9



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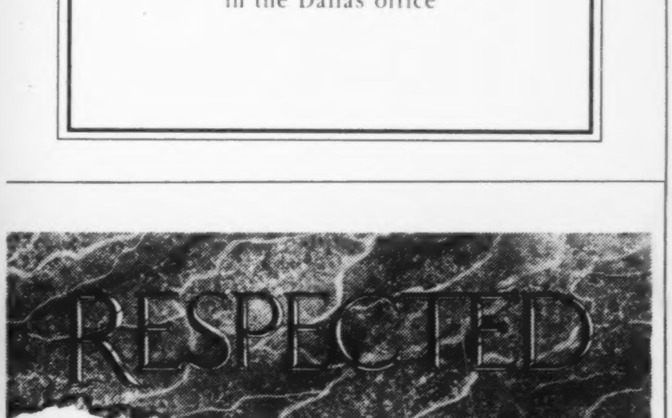

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Top PIPER fixed-income funds by size

1-year returns

Over $100 million

	%
Bankers Trust (Mtg. pass.)	9.5
Dominion Trust (Stable cap. B)	9.2
IDS Trust (GIC), Minn.	9.1
Chase-CMB (Sec. mgt.), N.Y.	9.0
IDS Trust (Cash mgmt.), Minn.	9.0
Hawaiian Trust (Defensive)	8.9
Aetna Life (Inc. shares), Conn.	8.9
Signet Trust (Stable val.), Va.	8.8
Bankers Trust (Govt./agency)	8.8
Chase-CMB (Short-Inter), N.Y.	8.7

$50 million to $100 million

	%
General American (SA 6), Mo.	10.5
Chancellor (Mtg. sec.), N.Y.	9.9
Mercantile Safe (Inter.), Md.	9.5
Chancellor (Inter.), N.Y.	9.3
Bankers Trust (B), N.Y.	8.8
Commerce Bank (Cap. pres.)	8.6
Bank One Wisconsin (Inter.)	8.6
Union Labor Life (SA G), D.C.	8.6
Continental Capital (Inter.), Ill.	8.6
Harris Trust (Gain), Ill.	8.2

$10 million to $50 million

	%
Sanwa Bank (C), Calif.	10.6
First Florida Bank	10.5
Jefferson Trust, Ill.	9.8
MTrust, Texas	9.3
First Nat'l of Maryland	9.2
Dauphin Deposit (Short), Pa.	8.9
Wellington Trust (Inter.), Mass.	8.9
Ameritrust (GNMA), Ohio	8.9
AmSouth (Ltd. mat.), Ala.	8.8
Central Fidelity (Cap. pres.), Va.	8.8

Under $10 million

	%
Mercantile Bank-Joplin (F)	17.1
SW Nat'l Bank of Pa.	10.0
Second Nat'l Bank, Ohio	9.1
First Nat'l-Amarillo (Inter.)	9.0
Central Fidelity (Short), Va.	8.8
First Variable Life (H.Q.), Ark.	8.7
First NH Invst. (B)	8.4
Old Second Nat'l (HR 10), Ill.	8.4
Home Life, N.Y.	8.4
First Nat'l of Tulsa, Okla.	8.3

10-year returns

Over $100 million

	%
Boatmen's Trust (F), Mo.	13.7
Sovran Capital (Inst.), Va.	13.5
First Kentucky Trust	13.0
ASB Capital Mgmt., D.C.	12.7
Pacific Financial, Calif.	12.6
Marine Midland, N.Y.	12.6
Prudential Realty (Privest)	12.3
Aetna Life (Inc. shares), Conn.	12.2
Bankers Trust (A), N.Y.	12.1
Mellon Bond, Pa.	12.1

$50 million to $100 million

	%
United Capital Mgmt., Colo.	13.2
Life of Virginia	12.9
Travelers Cos. (SA D), Conn.	11.9
Texas Commerce (Act. mgd.)	11.4
Liberty Nat'l, Ky.	11.4
Chancellor (Inter.), N.Y.	11.3
C&S Trust Florida	11.3
Bankers Trust (B), N.Y.	11.2
First Fidelity (Inter.), N.J.	11.0
Bank One Wisconsin (Inter.)	11.0

$10 million to $50 million

	%
Meridian, Pa.	14.3
Beverly Trust, Ill.	13.5
IAA Trust (B), Ill.	12.9
Sanwa Bank (C), Calif.	12.8
First Interstate/Calif. (Mgd.)	12.7
First Nat'l-Amarillo,	12.6
First Interstate/Ariz.	12.3
Assoc. Manitowoc (High), Wis.	12.1
Central Fidelity (Mgd.), Va.	12.1
First Nat'l of Maryland	12.0

Under $10 million

	%
First Variable Life, Ark.	13.7
Connecticut Nat'l Bank	12.6
Morgan Guaranty, N.Y.	12.4
Second Nat'l Bank, Ohio	12.1
Valley Nat'l (II), Ariz.	11.2
Oregon Bank	11.2
First Midwest, Moline, Ill.	11.2
First Variable Life (H.Q.), Ark.	11.1
First Trust, Colo.	11.0

United Capital Mgmt., Colo.	12.6
Prudential Realty (Long), N.J.	12.5
Beverly Trust, Ill.	12.4
First Variable Life, Ark.	12.3
The Principal, Iowa	12.2
Chase-CMB (Long term), N.Y.	12.2
General American (SA 9), Mo.	12.1
IAA Trust (B), Ill.	11.7
First Nat'l-Amarillo, Texas	11.7
Bankers Trust (Mtg. pass), N.Y.	11.5
General American (SA 6), Mo.	11.5
LaSalle Nat'l (Govt. corp), Ill.	11.5
Connecticut Nat'l Bank	11.5
Morgan Guaranty, N.Y.	11.4
Metropolitan Life (SA 41), N.Y.	11.4
Pacific Financial, Calif.	11.4
Harris Trust, Ill.	11.3
Crown Life (U.S.), Ontario	11.3
CoreStates Invst., Pa.	11.3
Sanwa Bank (C), Calif.	11.2
First Kentucky Trust	11.2
Sovran Capital (Inst.), Va.	11.2
Aetna Life (Inc. shares), Conn.	11.2
First Interstate/Calif. (Mgd.)	11.2
ASB Capital Mgmt., D.C.	11.1
Travelers Cos. (SA P), Conn.	11.1
First Interstate/Ariz.	11.0
Marine Midland, N.Y.	11.0
Connecticut Nat'l Bank (Inter.)	11.0
Society Nat'l, Ohio	11.0
First Wachovia, N.C.	10.9
Shawmut Bank, Mass.	10.9
Prudential Realty (Privest), N.J.	10.8
Continental Capital Mgmt., Ill.	10.8
NCNB Corp. (Long term), N.C.	10.8
First Variable Life (H.Q.), Ark.	10.7
Comerica, Mich.	10.7
Wellington Trust (Enhanced)	10.7
Colorado Nat'l Bank	10.7
Bessemer Trust, N.Y.	10.7
SLH G/C	**10.3**

10-year returns

	%
Meridian, Pa.	14.3
Boatmen's Trust (F), Mo.	13.7
First Variable Life, Ark.	13.7
Beverly Trust, Ill.	13.5
Sovran Capital (Inst.), Va.	13.5
United Capital Mgmt., Colo.	13.2
First Kentucky Trust	13.0
Life of Virginia	12.9
IAA Trust (B), Ill.	12.9
Sanwa Bank (C), Calif.	12.8
ASB Capital Mgmt., D.C.	12.7
First Interstate/Calif. (Mgd.)	12.7
Connecticut Nat'l Bank	12.6
First Nat'l-Amarillo, Texas	12.6
Pacific Financial, Calif.	12.6
Marine Midland, N.Y.	12.6
Morgan Guaranty, N.Y.	12.4
Prudential Realty (Privest), N.J.	12.3
First Interstate/Ariz.	12.3
Aetna Life (Inc. shares), Conn.	12.2
Assoc. Manitowoc (High), Wis.	12.1
Central Fidelity (Mgd.), Va.	12.1
Bankers Trust (A), N.Y.	12.1
Mellon Bond, Pa.	12.1
Second Nat'l Bank, Ohio	12.1
First Nat'l of Maryland	12.0
Society Nat'l, Ohio	12.0
Bankers Trust (Mtg. pass.), N.Y.	12.0
Travelers Cos. (SA D), Conn.	11.9
Cullen Bank, Texas	11.9
SLH G/C	**11.6**

Top two deciles PIPER special equity funds

3-month returns

	%
Chancellor (Emerg. health)	17.0
Equitable Capital (Sp. gro. 3)	13.7
Bessemer Trust (Emerg. gro.)	13.4
PW Trust (Agg.),N.J.	13.3
Chancellor (Emerg. gro.)	13.0
Ameritrust (Growth), Ohio	11.9
Shearson Trust (EF5), Del.	11.6
Lincoln Nat'l (Spec. opp.), Ind.	11.4
Meridian (Quest), Pa.	11.3
Pacific Financial (Sm. cap.), Calif.	11.1
Bankers Trust (Supp.), N.Y.	10.5
Comerica, Mich.	10.3
IDS Trust (Emerg. growth), Minn.	10.1
S&P 500	**6.3**
Russell 2000	**3.9**

1-year returns

	%
Chancellor (Emerg. health)	37.6
Equitable Capital (Sp. gro. 3)	33.0
Princeton Bank (Emerg. gro.)	32.1
IDS Trust (Emerg. growth), Minn.	28.0
Lincoln Nat'l (Spec. opp.), Ind.	27.4
Trust Co./West, Calif.	26.4
Meridian (Quest), Pa.	23.7
First Wisconsin Asset (Growth B)	23.3
Comerica, Mich.	22.8
Connecticut Nat'l	22.4
Texas Commerce	20.3
MTrust (Growth), Texas	20.0
Chancellor (Emerg. gro.)	19.0
S&P 500	**16.5**
Russell 2000	**3.1**

5-year returns

	%
Shearson Trust (EF3), Del.	29.7
Shearson Trust (EF2), Del.	28.1
Pacific Financial (Sm. cap.), Calif.	26.7
Connecticut Nat'l	21.2
First City (G/1), Texas	20.3
Meridian (Quest), Pa.	19.9
Putnam Cos. (Growth), Mass.	19.3
Shearson Trust (EF5), Del.	18.4
Trust Co./West, Calif.	18.3
Chase-CMB (Med. cap.), N.Y.	18.3
S&P 500	**17.3**
Russell 2000	**9.6**

10-year returns

	%
Provident Capital, Pa.	21.2
MTrust (Growth), Texas	19.5
Chase-CMB (Med. cap.), N.Y.	19.1
First Wisconsin Asset (Growth B)	18.9
S&P 500	**16.9**
Russell 2000	**14.2**

PIPER commingled international funds

3-month returns

	%
New York Life (Eq.)	12.1
Wilmington Trust (Eq.), Del.	11.8
Wellington Trust (Pacific Basin)	11.6
Travelers Cos. (SA W), Conn.	11.5
Putnam Cos. (Eq.), Mass.	11.0
Boatmen's Trust (Eq.), Mo.	10.5
Aetna Life (SA 134), Conn.	10.4
U.S. Trust, N.Y.	10.4
Wellington Trust (Emerg. stock)	10.3
Citicorp Invst. (Eq.), N.Y.	10.2
NCNB Corp. (Eq.), N.C.	10.1
Morgan Guaranty (Eq.), N.Y.	10.1
Provident Capital (Low p/e), Pa.	10.1
Chase-CMB (EAFE index), N.Y.	9.7
MSCI EAFE	**9.6**
State Street Bank (Index), Mass.	9.6
Bankers Trust (EAFE index), N.Y.	9.3
PCM Int'l (Print 2 eq.), N.J.	9.2
Prudential (Stock index), N.J.	9.1
Wellington Trust (Stock)	9.0
Bessemer Trust (E), N.Y.	8.9
Travelers Cos. (TIIF), Conn.	8.8
MTrust (Eq.), Texas	8.7
FTA Europe & Pacific	**8.5**
MSCI World	**8.2**
Bankers Trust (Eq.), N.Y.	8.1
The Principal (Stock), Iowa	8.1
Union Bank (Eq.), Calif.	8.0
CL Capital (Stock), Ga.	7.9
CIGNA Corp. (Eq.), Conn.	7.4
FTA World	**7.4**
IDS Int'l (Eq.), Minn.	7.1
Marine Midland (Eq.), N.Y.	7.0
Trust Co./West (Global), Calif.	7.0
Connecticut Mutual (Overseas)	6.8
Chase-CMB (Eq.), N.Y.	6.2
Assoc. Bank-Neenah (World)	6.1
MTrust (Bond), Texas	6.1
PCM Int'l (Global bond), N.J.	5.9
Chase-CMB (Fixed), N.Y.	5.9
IAA Trust (CTF-I), Ill.	4.2
Citicorp Invst. (Fixed), N.Y.	4.2
Morgan Guaranty (Bond), N.Y.	3.9
PCM Int'l (Global yield), N.J.	3.5

1-year returns

	%
FTA Europe & Pacific	**39.5**
CIGNA Corp. (Eq.), Conn.	35.5
NCNB Corp. (Stock), N.C.	34.4
FTA World	**34.1**
IDS Int'l (Eq.), Minn.	33.0
Travelers Cos. (SA W), Conn.	31.6
Wellington Trust (Emerg. Stock)	31.1
Wilmington Trust (Eq.), Del.	28.7
Putnam Cos. (Eq.), Mass.	28.5
CL Capital (Stock), Ga.	26.3
Wellington Trust (Stock)	25.7
U.S. Trust, N.Y.	23.7
Bessemer Trust (E), N.Y.	22.9
Provident Capital (Low p/e), Pa.	21.7

Picking

Continued from page 20

Corp.'s international stock portfolio with 34.37%.

Return data for the PIPER and PIPER+ universes are compiled by Rogers, Casey & Associates, Darien, Conn.

As an example of the volatility experienced this year, the returns of Pictet's Positive Value and Judgmental Risk accounts moved from −4.6% and −9.4% respectively in the first quarter to their stellar second-quarter showings.

For Pictet, second-quarter success largely hinged on "very good stock selection in almost all markets, especially Japan's," said Mr. Blanks. The Positive Value account, which takes a quantitative and bottom-up approach, had a low 10% weighting in Japan but a concentration in medium- to smaller-size stocks, especially in such sectors as retailing, pharmaceuticals and export-oriented companies. The Average Risk Category V account, which is top-down and "heavily judgmental" in approach — contained a larger, 28% weighting in Japan; in turn, those Tokyo holdings rose 24% in dollar terms during the quarter. The Japan return of the Positive Value account "was similar but not quite as good," said Mr. Blanks.

The international equity fund managed by Gamma Advisers "seems to have consistently outperformed in Japan. And the second quarter was the strongest we've had in that market," said Robert Rock, managing director.

As market or economic conditions changed, the fund's Japanese exposure jumped to 48.5% from 27% during the second quarter, while the European exposure climbed to 49% from 41%. But "we reduced our Japanese holdings during July to a current exposure of about 40%," said Mr. Rock.

IDS International's global equity fund benefited from several factors, including "incredibly good" stock selection in the U.S. market and astute timing of investments in certain European markets, said Peter Lamaison, president.

During the quarter, the fund had more than a 25% U.S. exposure, with a concentration on blue-chip growth stocks, such as of **Philip Morris Cos. Inc.** and **Waste Management Inc.**, and technology issues including **Microsoft Corp.** "Our move into technology stocks happened last year, but they really came to life in the second quarter," noted Mr. Lamaison.

Among other fortuitous moves: substantially switching out of the West German market before its second-quarter decline and into other perceived better-valued markets as Switzerland and Italy.

At its peak in early January, the fund's West German exposure had been more than 20%; in mid-August it stood at 6%.

In the second quarter, the fund had a relatively low Japanese weighting, about 10%. Having a low exposure was beneficial for the full year, but it proved less propitious during the quarter, Mr. Lamaison acknowledged. Results of the European market rotations helped compensate for that. ■

California risky, report says

NEW YORK — Sounding another warning about the nation's depressed real estate market, Moody's Investors Service says some of California's major markets are vulnerable to softening in the next two to three years.

Markets like San Diego, Orange County and Silicon Valley with significant exposure to the high-technology defense sector will suffer the most, the rating agency said.

In the same period, the rating agency said, asset quality measures for California real estate portfolios are likely to deteriorate, with the first evidence surfacing later this year or early next year.

As the major markets soften, California's four biggest banks — all of which have considerable California real estate exposure — will experience some portfolio deterioration. ■

Defense

Continued from page 17

outperform the market. That significantly benefited our performance," said Timothy Stives, vice president-portfolio manager. Holdings representing those industries include **Wal-Mart Stores Inc.**, **PepsiCo Inc.**, **Philip Morris Cos. Inc.** and **Johnson & Johnson.**

In light of the Middle East uncertainty, the portfolio since has become slightly more defensive. Cash was increased in the first week of August to 10% from 2%, and the portfolio mix was shifted to favor "defensive" industries of food and beverages, tobacco and health care over more "aggressive" industry groups such as retail and technology, he said. The firm did not buy energy stocks, however, because it does not consider energy industries a growth sector.

On the fixed-income side, Boatmen's Trust Co.'s $200 million Bond Fund F excelled by sticking to long bonds with 60% in U.S. Treasuries including zero-coupon bonds; 30% in mortgage-backed securities; and 10% Canadian issues. Mortgages and Treasuries were both high performers for the quarter.

The average maturity is a hefty 24 years — "short compared to the liabilities of my pension customers. Their people are going to live forever with these new medical discoveries," said Robert Franklin, senior vice president. The portfolio has few corporate bonds because of the credit risk.

Los Angeles-based Mercantile Bank Joplin's $6 million Fund F also was helped by its lengthening of maturities, to an average of eight to 12 years from four to seven years. The firm began lengthening maturities in February because executives believed long rates had peaked around 9%. The firm also reduced corporate holdings while boosting holdings of longer term Treasuries and mortgage-related securities — both of which did well in the second quarter, said Thomas Atteberry, chief investment officer.

Sanwa Bank California's Investment Trust Fund C posted a 10.59% gain, ranking second for the year, while St. Louis-based General American Life's Separate Account 6 was third with 10.52%.

The $27 million Sanwa fund has a large position in mortgage-backed securities and higher-yielding corporate bonds with some 30-year utility bonds callable in one to two years. "The emphasis has always been on maximizing income and staying fully invested," said Donald Cogswell, vice president and trust investment officer.

The portfolio's average maturity is 8.6 years and its average duration is 4.5 years. ■

The Principal (Stock), Iowa	21.6
Bankers Trust (Eq.), N.Y.	21.3
PCM Int'l (Print 2 eq.), N.J.	21.0
Citicorp Invst. (Eq.), N.Y.	19.2
Aetna Life (SA 134), Conn.	17.3
Citicorp Invst. (Fixed), N.Y.	16.9
Morgan Guaranty (Eq.), N.Y.	15.5
Union Bank (Eq.), Calif.	15.4
PCM Int'l (Global yield), N.J.	15.2
Assoc. Bank-Neenah (World)	15.0
Connecticut Mutual (Overseas)	14.4
Marine Midland (Eq.), N.Y.	12.4
New York Life (Eq.)	11.8
PCM Int'l (Global bond), M.J.	11.7
IAA Trust (CTF-I), Ill.	11.6
Boatmen's Trust (Eq. W), Mo.	10.5
Wellington Trust (Pacific Basin)	10.5
MTrust (Eq.), Texas	9.4
Trust Co./West (Global), Calif.	8.6
Morgan Guaranty (Bond), N.Y.	8.2
Chase-CMB (Fixed),N.Y.	8.0
MSCI World	**7.7**
MTrust (Bond), Texas	7.0
Chase-CMB (Eq.), N.Y.	5.8
Bankers Trust (EAFE Index), N.Y.	.4.4
MSCI EAFE	**3.5**
Prudential (Stock index), N.J.	3.5
State Street Bank (Index), Mass.	3.4
Chase-CMB (EAFE index), N.Y.	3.3
Travelers Cos. (TIIF), Conn.	2.9

5-year returns

	%
FTA Europe & Pacific	**37.1**
Provident Capital (Low p/e), Pa.	33.2
Bessemer Trust (E), N.Y.	33.1
CIGNA Corp. (Eq.), Conn.	32.9
Bankers Trust (Eq.), N.Y.	31.3
NCNB Corp. (Eq.), N.C.	31.1
U.S. Trust, N.Y.	29.4
Wellington Trust (Pacific Basin)	29.3
MSCI EAFE	**29.0**
Chase-CMB (EAFE index), N.Y.	28.9
State Street Bank (Index), Mass.	28.6
Putnam Cos. (Eq.), Mass.	28.6
IDS Int'l (Eq.), Minn.	28.3
Prudential (Stock index), N.J.	28.3
Wellington Trust (Stock)	28.1
FTA World	**27.9**
Citicorp Invst. (Eq.), N.Y.	27.8
Aetna Life (SA 134)	27.4
Travelers Cos. (SA W), Conn.	27.0
Marine Midland (Eq.), N.Y.	26.9
Chase-CMB (Eq.), N.Y.	26.6
Boatmen's Trust (Eq. W), Mo.	26.3
Morgan Guaranty (Eq.), N.Y.	25.9
Union Bank (Eq.), Calif.	25.1
PCM Int'l (Global bond), N.J.	23.4
MSCI World	**22.2**
Chase-CMB (Fixed), N.Y.	19.4
Citicorp Invst. (Fixed), N.Y.	18.8
Morgan Guaranty (Bond), N.Y.	17.7

10-year returns

	%
Bankers Trust (Eq.), N.Y.	21.0
Putnam Cos. (Eq.), Mass.	20.4
MSCI EAFE	**19.7**
U.S. Trust, N.Y.	19.6
Citicorp Invst. (Eq.), N.Y.	17.7
MSCI World	**17.7**
Morgan Guaranty (Eq.), N.Y.	16.8
Morgan Guaranty (Bond), N.Y.	11.7

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Growth

ontinued from page 17

Two business areas that Combined Capital likes are companies nvolved in either testing or proprietary data and communication ervices.

To that end, the firm owns **Huntingdon International Holdings PLC**, a U.K.-based company whose stock trades as an American depository receipt.

Half of Huntingdon's business s biological and medical testing. The other half is in testing for environmental compliance, and is operated from the United States.

Combined Capital also owns **Reuters Holdings PLC**.

"It's based on the belief that proprietary data and communication services is an excellent business, and that they are an excellent company in that business," Mr. Whisnand said.

The favorable returns of Cheswick Investment's $100 million equity composite were "achieved because we were bullish on growth stocks," said Richard G. Cheswick, president.

The firm emphasized pharmaceutical companies, which represented 0% to 35% of the portfolio.

"We do not diversify," Mr. Cheswick said. "We only invest in handful of industries that are he best we can find."

First-quarter returns for rowth stocks were between 5.3% nd 5.5%, the result of profit taking, according to Mr. Cheswick.

"We didn't try to avoid that decline," he said. What the firm ound instead were stocks Mr. Cheswick described as "Cadillacs nd Mercedes selling at Chevrolet nd Volkswagen prices."

Cheswick's holdings include **Merck & Co. Inc.**, **Bristol-Myers Squibb Co.**, **Alza Corp.**, **Philip Morris Cos. Inc.**, **Coca-Cola Co.** nd **The Walt Disney Co.**

Dawson Samberg Capital's Growth Pequot fund benefitted rom out-of-favor growth companies that re-established their rowth patterns, according to rthur Samberg, company president and portfolio manager.

Two such companies were **Adaptec Inc.**, a data processing concern, and **PacifiCare Health Systems Inc.**, a health maintenance organization.

Adaptec at one point was an industry leader. Then earnings declined and the stock collapsed, according to Mr. Samberg. But it never lost money, he said.

"I was able to buy the stock at 30% of earnings."

PacifiCare's had the misfortune of being in the HMO industry during the shakeout in the late 1980s, according to Mr. Samberg.

"Earnings went down 50%. As the industry turned, the stock appreciated."

Hedging techniques also are used, Mr. Samberg said.

"I buy index puts and I will short. I try to hedge to keep the risk profile lower."

Among balanced funds, Provident Investment Counsel's $120 million balanced composite account was first for the quarter and year, with returns of 13% and 25.74%, respectively.

The PIPER+ median balanced fund returned 4.82% for the quarter and 12.03% for the year.

Provident's balanced accounts are driven by growth stocks, according to Jeffrey Miller, executive vice president.

"Our long-term philosophy is in the long run, we know stocks will outperform bonds and cash," Mr. Miller said. "They are equity driven based on the opportunities we see in the equity markets."

Remaining cash is used to buy fixed-income securities based on the manager's duration decision.

The asset mix is about 60% equity, 30% fixed income and 10% cash, according to Mr. Miller.

Provident's equity holdings include Home Depot, **Wal-Mart Stores Inc.** and **PepsiCo Inc.**

On the fixed-income side, W.R. Huff Asset Management's fixed-income account was first for the quarter with a return of 6.43%. Philadelphia Investment Management's fixed-income portfolio was tops for the one-year period, returning 10.47%.

The Shearson Lehman Hutton Government/Corporate Bond Index posted returns of 3.6% for the quarter and 7.11% for the year. The median PIPER+ fixed-income portfolio returned 3.23% for the quarter and 7.38% for the year. ■

Stumble

Continued from page 17

malls was slightly positive in the Midwest, 0.9%, and negative in the East, −0.2%.

The fact the trust assets are invested principally in major malls, which have had flat appreciation, has led to lower than previous returns, according to John Lillard, president of JMB Institutional Realty.

He predicts valuations are likely to be soft for two to three years.

Besides retail malls, the trusts have substantial investments in large office buildings. Office building returns have been significantly underperforming retail malls.

For the year ended March 31, retail malls returned 9.7%, while office buildings returned 3%.

Pension officials, however, got overall positive investment performance from real estate even during the falling stock and bond markets of the first quarter. That appeared to show that real estate — as real estate advisers have long contended — has a low correlation with the movements of the stock and bond markets.

According to PIPER, open-end real estate funds scored a median return of 1.2% in the first quarter. Closed-end funds scored an even higher median, 1.5%. But during the same period, the stock and bond indexes had negative returns.

The Standard & Poor's 500 Stock Index scored −3% for the quarter and the Shearson Lehman Hutton Government/Corporate Bond Index returned −1.1%.

Longer term, however, real estate pooled returns look generally weak against the stock and bond markets.

For the 12 months ended March 31, real estate open-end funds returned a median of 7.4% and closed-end, 7.1%.

For the same year, the S&P scored 19.2%, and the SLH Government/Corporate index, 11.7%.

Another problem for the investor is that individual real estate fund returns are widely separated. For the year ended March 31, a separate account timber fund from John Hancock Properties, Boston, scored the highest open-end fund return, 40%.

First Wachovia Corp.'s Real Estate Fund, an open-end developmental fund, had the lowest return for that period, −16.1%.

The HPF1 fund of Equitable Real Estate Investment Management, New York, had the highest one-year return for closed-end funds, 26.4%. It is a small fund dominated by one regional mall.

Fund I of Equitec Institutional Realty Advisers Inc., Oakland, Calif., had the lowest 12-month return for closed-end funds, −44.26%.

Even some funds advised by the same real estate manager posted a wide spread.

State Street Bank & Trust Co., Boston, Real Estate I fund, advised by Aldrich, Eastman & Waltch, Boston, scored the second highest return among closed-end funds for one year, 22%.

But for the same period, State Street's Real Estate Fund II scored −10.85% and State Street's Real Estate IV scored −5.1%. Aldrich, Eastman & Waltch also manages both those opportunity funds.

PIPER, compiled by Rogers, Casey & Associates, Darien, Conn., tracks bank and insurance company commingled funds. ■

Health

Continued from page 20

The post-venture portfolio of Brinson Partners Inc. finished second among the PIPER+ universe for the second quarter and the three-year period, with respective returns of 12.46% and a compound annualized 19.55%.

The $70 million fund is value oriented, focusing on stocks with innovative management, growth in market positions, strong balance sheets and other good financials, according to Alvin Marley, manager of post-venture investments.

The firm chooses its stocks not so much on where the company is but where it will be, Mr. Marley said.

RTA Management Inc.'s Hedge Fund was the third best performing fund for the quarter, at 12.2%, and the second best for the year at 43.56%.

According to Richard Tuck, chairman, the fund hedges by selling short half of the 50-stock portfolio.

Mr. Tuck said, however, the firm counts on making its money with the stocks that aren't sold short.

For the one- and five-year periods, The Southgate Partners account of the short-selling Feschbach Brothers led the way among the PIPER+ managers, returning 44.36% and 32.78%, respectively. All returns for periods of more than one year are compound annualized.

For the year ended June 30, the median PIPER+ manager returned 4.43%, and for the five-year period, 10.61%.

The S&P returned 16.51% and 17.3%, and the Russell 2000 returned 3.05% and 9.57%, respectively. ■

Banker group glowing over CDA report

A bank group is touting a recent study by CDA Investment Technologies Inc. that indicates commercial bank trust departments outperformed insurance companies, mutual funds and investment managers in equities during 1989.

The American Bankers Association was so proud of the study it released the findings at its recent National Trust & Financial Services Conference in New York. Problem is, CDA's annual study does not include one-year returns, according to CDA President Robert Levy. He said the firm provides the one-year data to the bankers but does not include it in its annual study because the study is meant to take a long-term view of investment performance.

The annual study, gleaned this year from data from 1,394 equity managers and 662 fixed-income managers, revealed banks' equity accounts returned on a weighted average an annualized 16.1% for the three-year period ended Dec. 31, ahead of the other categories.

Banks also were better than mutual funds for the five- and 10-year annualized periods ended Dec. 31, returning 19.2% and 16.8% respectively, but they dipped below insurance companies and investment managers by tenths of percentage points.

According to the CDA survey, none of the groups performed better than the Standard & Poor's 500 Stock Index for the three periods.

On the fixed-income side, banks again performed better than mutual funds for the one-, three- and five-year annualized periods. Insurance companies outperformed banks by one-half of a percentage point for the three periods the survey measured.

Figures for investment managers' fixed-income performance were not available.

As with equities, the market benchmark — CDA chose the Shearson Lehman Hutton Aggregate for this study — outperformed the groups for all three

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Investors calm

Continued from page 3

economy got hit right away, and mall stocks in general got hit etty hard too."

Among its purchases since the nvasion are **Ford Motor Co.** in utomobiles, **Compaq Computer Corp.** in technology and **Petrie Stores Corp.** and **Loews Corp.** n retail.

Mr. Foote said the firm, which uns $25 million in tax-exempt ccounts, reduced its cash from bout 10% of portfolios to 5% ince the invasion.

William A. Inskeep, chief investment officer of Wm. A. Inskeep & Co., Fort Myers, Fla., said, "We committed some funds when he market (declined).

"We had some reserves and hought some bargains were vailable, primarily in higher p/e stocks," including **The Home Depot Inc.**, **United States Surgical Corp.** and **Syntex Corp.**

"In general, we were running 15% to 18% in (cash) reserves, and we probably committed half of hat," Mr. Inskeep said.

"I tend to be more optimistic," but he acknowledged that "if something horrendous happens (in the Middle East) it will be too late to get out (of the stock market)."

He said his portfolios contain mostly consumer non-durable and service-type companies that tend o do well under economic strain. "We're fortunate" that the portfolios before the invasion held in general 15% of their holdings in oil and oil service stocks. But, he said, "We don't own any airlines or chemical or refinery companies," stocks he's happy to keep out of the portfolios.

At Invista Capital Management Inc., Des Moines, Iowa, S. Ralph Kosmicke, chief investment officer, said: "There's no good news coming out of the Mideast to help the U.S. economy. It's squeezing the consumer, raising inflation."

Corporate earnings increases have been getting scarcer, a trend the Middle East crisis likely will further, he added.

Invista, always fully invested, has been increasing its exposure to those growth stocks with earning gains potential. "We think we're buying scarce earnings gains," he said. "We think the stock of Motorola or 3M likely will do better when they show earnings gains and other companies won't. You get exclusivity or scarcity of value, if you will . . . The situation in the Mideast likely will cause a further scarcity in earnings gains."

Pension funds that were invested in oil assets — whether stocks or wells — prospered as a result of their foresight and the crisis.

John Hill, managing director, First Reserve Corp., Greenwich, Conn., which offers direct investments in the energy business, said pension funds have a total of about $1.5 billion in direct energy investments.

First Reserve since the mid-1980s has placed about $300 million for several pension fund clients including Eastman Kodak Co., Honeywell Inc., the Minnesota State Board of Investment and Southern New England Telephone.

Mr. Hill said the impact of the Middle East crisis for institutional holdings in energy "means their assets are worth a lot more than they were about two weeks ago, about 25% to 30% in the last two weeks if prices stay where they are."

Tactical asset allocators reacted in various ways to the Middle East developments.

Schield Management Co., Denver, moved its accounts to a defensive position before the Iraqi invasion. Its model depends on price momentum, and price momentum broke down before the invasion because of inflationary and recessionary fears in the market, said Marshall Schield, president.

In the last week of July, Schield moved its $180 million in assets in its primary strategy to 100% cash from 100% equities. In its aggressive strategy, it continued to hold stocks but sold futures to make the portfolios 100% hedged. It has about $5 million in this strategy.

The Middle East troubles, Mr. Schield added, make this move look even better, as the troubles have added to the fears of inflation and recession.

PanAgora Asset Management, Boston, was underweighted in equities and bonds before the invasion, and subsequent market gyrations haven't changed its position much, according to Ed Peters, manager of asset allocation. "All of our economic indicators had been bearish for some time," he said. In accounts with a standard allocation of 60% equities and 40% bonds, the firm was 50% stocks, 20% bonds and 30% cash; it moved the bond allocation up to 25% and reduced cash to 25%, leaving equities the same, as the yield curve steepened after the bond market's Aug. 6 collapse.

Matrix Capital Management, Greenwich, Conn., has not changed the allocation in its TAA accounts. In accounts with a target mix of 60% stocks and 40% bonds, the allocation is 65% stocks, 30% bonds and 5% cash.

It's too hard to know what the final effect will be on the U.S. economy to make judgments based on the crisis, said Mike Petrino, president.

Therefore, he said, the best thing to do is to be neutral until it's all sorted out.

Bankers Trust Co. — Investment Management Group, New York, gradually has reduced the equity exposure of its TAA accounts since the end of June. This is because of the downward trend in equity prices, and this trend is due partly to the Middle East crisis but also to the soft economy and higher odds of a recession, said Steve Lauer, senior vice president.

The 62% equity allocation at the end of June has been reduced to 49% in three steps. The bond allocation has gone up to 51% from 38%, and the TAA portfolios have no cash right now.

While most funds and money managers did not panic, the crisis did cause a surge in hedging activity.

Volume on the Chicago Board Options Exchange rose when the stock market reacted to the invasion, said Alger B. "Duke" Chapman, chairman of the CBOE.

Index options were more active than options on individual stocks, he added. The week ended Aug. 17 is an expiration week, which could account for some of the increased activity, he said.

The Chicago Mercantile Exchange saw its volume spike up in the week following the invasion, with the most volume occurring Aug. 3, when 728,021 contracts changed hands, almost twice the average daily volume this year.

Eurodollar futures were particularly active. On the Singapore Monetary Exchange, total volume went to 72,279 contracts Aug. 2 from 19,834 the day before.

While stock index futures volume rose somewhat as the markets reacted to the Iraqi invasion, their volume didn't keep pace with the increase in stock volume, according to statistics from PaineWebber Inc., New York.

Stock volume has surged more than futures volume apparently because investors are making bets on sectors of the market, rather than the market as a whole, said Joanne Hill, first vice president of PaineWebber's derivative products group. Also, the recently imposed Securities and Exchange Commission rule that makes index arbitrageurs wait for an uptick before executing the stock side of their trades on days the market has moved 50 points or more may have restricted arbitrage activity, she said.

The domestic equity accounts of Brinson Partners Inc., Chicago, were 29% hedged going into the Middle East crisis; the firm had moved to this position early in June, up from 24%.

"It's our opinion that we should maintain the hedge for a bit longer," said Jeff Diermeier, managing partner-U.S. equities. The reasons include the rise in interest rates and fall in the Japanese market. Brinson Partners has $3 billion in U.S. equities and uses stock index futures (usually the S&P 500, which is the most liquid contract) to hedge. ■

Oil belt

Continued from page 3

have a "show me" attitude, said Robert D. Barkley, a vice president with L.J. Melody & Co., Houston, a real estate investment adviser.

Bruce Hineman, chief executive officer of the $23 billion Teacher Retirement System of Texas, Austin, said it might take a year before there is any effect from the rise in oil prices.

The retirement system has 8% of its assets in participating mortgages, several of them in Texas.

One problem that would slow any recovery in the oil states, said Mr. Hineman, is that oil rigs have been mothballed, and it is unlikely that they will be put back to use quickly. Oil exploration and drilling brought jobs to the Southwest, thus sparking the economies there.

In addition, many states have reduced their economic dependency on the oil industry. For example, oil now represents about 15% of the Texas economy, compared with 25% in the past, Mr. Hineman said.

Financing for new exploration also may be difficult to attract. Messrs. Hineman and Barkley said banks are still leery to lend for oil exploration after the collapse of prices in 1986.

Mr. Kateley, however, said lending on oil exploration and refining is a high-margin business for banks, and banks are "dying for high-margin business."

Once assured higher oil prices are not just temporary, the "financial community will be relatively quick to seize on lending opportunities" connected with oil exploration and refining, he said. ■

PBGC

ontinued from page 1

he potential for absorbing illions of dollars in liabilities rom poorly funded pension lans.

In addition, both the General Accounting Office and some members f Congress have focused on the overnment's potential exposure to ension liabilities.

James A. Lockhart III, the BGC's executive director, has sed the "hidden Pac-Man" analgy in referring to the agency's xposure to underfunded pension lans. The PBGC had a $1 billion eficit as of Sept. 30, down from 1.5 billion 12 months earlier.

Mr. Lockhart wouldn't comment on the specifics of the OMB ocument. The PBGC is expected o unveil legislative proposals arly next year, some of which ere incorporated in the OMB ptions paper.

OMB officials could not be eached for comment.

Any effort to further increase BGC premiums or to trim or liminate PBGC guarantees, however, is likely to elicit howls of rotest from business, labor and lan participant groups.

Premiums were raised in 1986 nd 1987 from a flat rate of $2.60.

Organized labor strongly fights ny efforts to pare back PBGC uarantees. Mr. Lockhart has told ongress plant shutdown benefits, which are supplemental benefits that kick in only when a plant is closed and are not prefunded or assessed a premium, have generated $1 billion of the agency's $4 billion in liabilities.

"We obviously strongly oppose any cutback in PBGC guarantees, in any shape or form," said Alan Reuther, associate general counsel for the United Auto Workers, Washington. There is no financial need to change the variable rate premium, and the PBGC should not be managed like a private insurance company that carries zero risk because it is a social insurance program, he said.

In its July 16 draft paper, OMB said limits would be set for the PBGC that could trigger increased surcharges, limit program coverage or otherwise reduce risk to the government.

"For example, whenever PBGC's exposure (unfunded vested benefits) increases by more than 10 percent or $1 billion in covered defined benefit pensions, a surcharge could be imposed on the variable portion of the premium that is paid by plans with unfunded vested benefits," the paper said.

The paper later said the variable rate portion could be increased enough to amortize the increase in PBGC liability over five years, while not changing the $16 basic rate.

Another option would be to impose a surcharge on employers with underfunding exceeding $50 million. The surcharge would be set at the cost of borrowing any amounts over $50 million based on the difference between the company's long-term commercial borrowing rate and the interest rate for highest-rated investment grade bonds.

Employers would have the choice of paying the surcharge or pledging corporate assets to the PBGC to secure the underfunding. The $50 per participant cap on the variable premium would be removed under this option.

This option would take a toll on large plans that might be marginally underfunded on a percentage basis, but still short hundreds of millions of dollars.

The administration also is thinking of making changes that stem from the PBGC's litigation against The LTV Corp. OMB suggested giving the PBGC priority status for the full amount of its claim in bankruptcy proceedings, which could hamper employers' ability to reorganize under Chapter 11 of the Federal Bankruptcy Code.

In addition, the government could require that PBGC interest rates be used in determining the present value of a bankrupt employer's unfunded pension liability.

The U.S. Bankruptcy Court overseeing the LTV case ruled against the PBGC on both of those issues, which had the effect of substantially reducing the agency's claims.

OMB also suggested requiring inclusion of the PBGC on creditor committees. ■

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AT DEADLINE

Wilshire retained

The California Public Employees' Retirement System signed on its consultant, Wilshire Associates, for another three years. Wilshire beat out six other firms for the job, which will be for general and external manager consulting.

Salomon lays off 30

Salomon Brothers Inc. has laid off about 30 employees, including a "handful" of real estate professionals, confirmed Gregory A. White, a managing director and head of Salomon's real estate finance department.

While Salomon's commitment to real estate hasn't changed "one iota," Mr. White characterized the move as a "proactive" step to curtail costs and manage resources more efficiently.

Also, Bear Stearns' real estate brokerage business has been pared from seven full-time employees to four with part-time duties in that area.

Maryland hires 2

The Maryland Supplemental Retirement Plans hired two professionals.

Moses Daniels, formerly self employed, was named financial director. Delena Woods Murphy is now director of field operations and communications. Ms. Murphy recently relocated from Florida and was not employed.

Law's impact assessed

Eight Pennsylvania corporations that opted out of all three sections of the anti-takeover/anti-shareholder law earned an average of 2.3% more than the Standard & Poor's 500 Stock Index for the five days surrounding the announcement of the opt-out.

A new study by Wilshire Associates concludes the law reduced share prices of affected Pennsylvania companies by four percentage points vs. what they would have been if the law were not enacted.

Marketer shifts jobs

Equitable Capital Management has hired Stephen Brennan to serve as a vice president with the firm's pension marketing team, said Joseph Briggs, senior managing director and head of the pension markets group. Mr. Brennan, formerly with Siebel Capital Management, will focus on public plans and will report to Mr. Briggs.

Hospital taps 4 firms

Magee-Womens Hospital in Pittsburgh hired four managers for part of its $26 million funded depreciation account. Hired were: C.S. McKee & Co. Inc., for $5.5 million in fixed income; American Hospital Association Investment Funds Inc., for $2.5 million in fixed income; GAMCO Investors Inc., for $5.5 million in equities; and Mellon Capital Management, $2.5 million in equities. Assets had been managed internally.

Suit threatens leveraged ESOPs

Says 'cash drain' must be considered

By Joel Chernoff

WASHINGTON — The Department of Labor has fired another torpedo at leveraged employee stock ownership plans.

The torpedo that could sink leveraged ESOPs — at least of privately held companies, according to plan proponents — is a lawsuit in which the Labor Department argues plan fiduciaries must take into account the "cash drain" on corporate finances caused by expected contributions to the ESOP. If they fail to do so, the ESOP might be paying too high a price for company stock, the Labor Department contends.

If successfully litigated, this stance would drive down valuations of employer stock purchased by leveraged ESOPs where there is no public market for the stock, making it unlikely anyone ever would sell a majority holding to an ESOP, experts charged.

Less clear, however, is how the department's position will affect ESOPs in publicly held companies. Some experts believe the department's stance would torpedo leveraged ESOPs that have a majority stake in publicly held companies, including the pending UAL Inc. deal.

Marc Machiz, an associate solicitor at the Labor Department, declined to discuss the potential impact on publicly held companies.

The lawsuit, involving a small Rhode Island company, has outraged the ESOP community.

"This is about as far out in left field as the Department of Labor has been in a long time," said Rick Braun, managing director at Houlihan, Lokey Howard & Zukin Inc., a Los Angeles valuation firm.

The department's position "basically means the death of leveraged ESOPs," he said.

David Binns, executive director of the ESOP Association, Washington, added: "People are upset about this with a capital U."

The department's complaint contained only a rough outline of the events, causing attorneys to scurry to find out more information. But this much is clear: the Labor Department has marked this as a major case. At a recent American Bar Association meeting, Robert Davis, the solicitor of labor, made numerous comments about the lawsuit, lawyers said.

The case is the second major ESOP lawsuit filed by the department in recent months. In December, the department filed suit in a case involving the Kroy Inc. ESOP; the government alleged the ESOP overpaid for its shares compared with other investors in the December 1986 leveraged buy-out of the Scottsdale, Ariz., lettering equipment manufacturer (*Pensions & Investments*, July 9).

The latest case, however, does not involve a multi-investor situation, but rather the sale of 80% of the company's stock from the estate of Simon Wardwell, a deceased shareholder of Wardwell Braiding Machine Co. of Central Falls, R.I.

On Dec. 19, 1985, the estate sold 2,600 shares of Wardwell Braiding's stock to the newly created ESOP for $5.46 million. In a mirror transaction, Fleet National Bank made a 10-year loan of $5.4 million to Wardwell Braiding, which in turn advanced that sum to the ESOP as well as contributing $60,000 in cash.

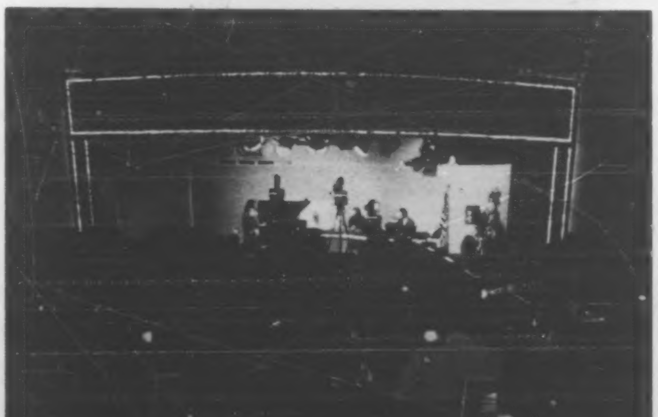
According to the ESOP's 1985 annual report filed with the Labor Department, the stock was valued at only $4.16 million by the end of the year — less than two weeks later.

While the ESOP's value had appreciated to $5.83 million by the end of 1988, the fact the stock was devalued immediately after the transaction led to the Labor Department's lawsuit.

The complaint was filed July

See **ESOPs** *on page 59*

Bond portfolios sprout stocks



Home Shopping Network was ordered by a judge to issue stock to its debtholders.

By Marlene Givant Star

The Aug. 21 restructuring of Interco Inc. and ongoing workouts of more than 12 other highly leveraged companies are turning bondholders to stockholders overnight whether they like it or not.

Public bondholders are beginning to grapple with managing a mounting stockpile of equities. While equity holdings now might total only 5% of a bond portfolio, investment bankers and workout experts say the proportion of equities will soar in the next two years.

Some bondholders are acting as "debt raiders" and systematically amassing bonds of distressed companies with the goal of taking the companies over. But more often, as in Interco's situation, public bondholders end up receiving equity stakes as companies default and their bond values erode.

In another case, a judge ruled Aug. 14 that Home Shopping Network Inc. had cheated bondholders and would have to issue millions of shares to bondholders as well as damages unless an appeal is successful.

Those bond-turned-equity investors will have to decide whether to passively hold the distressed equities in the hopes of a corporate comeback or learn to actively manage the holdings.

As bondholders get closer to the inner workings of companies through aggressive involvement in workouts, active equity management is an ironic progression from their position as creditors.

"It's happening more and more

See **Bondholders** *on page 62*

U.K. law indexes benefits

By Fred Williams

LONDON — Changes to pension laws in the United Kingdom contain far-reaching measures that could increase dramatically pension costs for U.K. firms and subsidiaries of U.S. companies by indexing pension benefits to inflation.

The law also might hasten the trend of companies dropping defined benefit plans in favor of defined contribution plans, which largely are unaffected by the new regulations.

The changes, enacted in July, will peg pension benefit increases at the lesser of 5% a year or the increase in the Retail Price Index.

The Dow Chemical Co., Midland, Mich., converted its U.K. defined benefit plan in July 1988, partially in response to the government's proposal to protect pension benefits against inflation.

Loren Pierce, director of compensation and benefits at Dow, said the change in U.K. law "was one issue we considered, a general consideration . . . but we decided about three years ago that with our long experience with defined benefit

See **U.K. law** *on page 59*

NEWS DIGEST

Employee stock ownership plans, a product of U.S. ingenuity, could become a good vehicle for industrial productivity in Prague and other Eastern European cities. Page 43.

The pilots union will appeal a decision allowing Eastern Airlines to freeze pension plan contributions. Page 63.

SPECIAL REPORT: LARGEST REAL ESTATE MANAGERS

Separate accounts now reign as the investment of choice for tax-exempt investors, a *Pensions & Investments* survey indicates. Page 23.

CASH MANAGEMENT

The distinct lines between cash management and corporate finance are fading in American corporate treasury offices. Page 19.

CORPORATE FINANCE

Restructurings and workouts of highly leveraged companies are turning bondholders to stockholders whether they like it or not. Page 1.

U.S. institutional investors for the first time voted at the meetings of hundreds of Japanese companies. Page 53.

INTERNATIONAL

Changes in U.K. pension laws contain far-reaching measures that could increase dramatically pension costs by indexing pension benefits to inflation. Page 1.

High tensions in the Mideast are pushing world bond markets into a tizzy. Page 6.

REAL ESTATE

Equitec Financial Group, whose subsidiary already was under siege by investors, files Chapter 11. Page 2.

Investment vehicles seeking to capture increasing farmland values are trying to raise more than $300 million from pension funds. Page 23.

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Equitec files Chapter 11

Subsidiary exits tax-exempt institutional arena

By Steve Hemmerick

OAKLAND, Calif. — Equitec Financial Group Inc., the parent of Equitec Institutional Realty Advisers Inc., has filed for protection under Chapter 11 of the federal Bankruptcy Code, citing "difficult times in the real estate industry."

The filing, made Aug. 29 in U.S. District Court for the Northern District of California, includes Equitec Institutional, but not the firm's limited partnerships or group trusts for institutional investors, according to Susan Kopp, vice president with Equitec Financial.

Previously, Equitec Institutional had announced plans to quit the institutional real estate investment business after being replaced as general partner of one of its commingled funds and facing the likelihood of being removed from two others.

Investors holding more than 51% of Equitec Institutional's $43 million Fund II, a closed-end real estate fund, decided July 27 to replace the firm as adviser with PMRealty Advisors Inc., Newport Beach, Calif.

The switch was expected to be completed Aug. 31, according to Paul Boland, chief executive officer of the $1.1 billion San Diego County Retirement System, which is an investor in Equitec Fund II and III.

He said investors are trying to "put to bed" the replacement of Equitec Institutional as adviser on Fund II before beginning work on replacing Equitec as adviser for the $46.5 million Fund III, which is structured as a group trust.

While the move is expected, no vote by participants has been taken.

In addition, trustees for K mart Corp.'s $1 billion pension fund are considering replacing Equitec as adviser to the $31 million Fund I.

K mart, Troy, Mich., which is not a participant in either Fund II or III, controls 66.67% of th assets of Fund I. Equitec's Fun I also is a limited partnership an a vote by an investor or investor holding 51% of the assets can effect a replacement of the adviser.

John Hartman, assistant treasurer for K mart, said executive from Equitec Institutional approached K mart about replacin the firm with Koll Realty Advisors, Newport Beach, Calif. H said no decision has been made o whether to replace Equitec no has a timetable been set for th replacement.

Mr. Hartman declined to sa why Equitec had suggested its replacement as adviser for Fund III.

Mr. Boland said he didn't thin the Chapter 11 filing would affec the attempts to replace Equitec He noted San Diego County fun officials had been concerne about the firm's financial condition since the beginning of th year.

Ms. Kopp agreed, adding replacing of Equitec at the commin

See **Equitec** *on page 5*

Venture interests lure investors

By Trudy Ring

CHICAGO — Three large pension funds are among the participants in Brinson Partners Inc.'s Venture Partnership Acquisition Fund II, which will buy venture capital partnership interests on the secondary market.

Brinson Partners raised $111 million from 12 limited partners, mostly pension funds. Those that have identified themselves are the State Universities Retirement System of Illinois; the General Mills Inc. pension fund; and the Virginia Retirement System.

The secondary market has grown as investors have seen a need for liquidity. For instance, some corporate investors that went into venture capital for strategic rather than purely investment reasons in the 1980s might have changed their strategies now and may need cash, said Bart Holaday, managing director-venture capital at Brinson Partners.

Secondary interest purchases, with a shorter holding period and possibly better pricing than traditional venture capital interests, have a favorable risk-return profile, added Marianne Woodward, partner and senior venture capital adviser. The number of partnership interests that become available is limited, however: "I don't think it will ever be an enormous market," she said.

Photo by Mary Herlehy

Ken Codlin said secondary venture capital interests will be part of a larger program.

Brinson Partners, then known as First Chicago Investment Advisors, raised another secondary market fund in 1988. That fund, Venture Partnership Acquisition Fund I, raised $47 million from nine investors, including several corporate and public pension funds (*Pensions & Investments*, April 18, 1988). As of Dec. 31, the fund had a compound annual return of 21.5%, according to a prospectus for the new fund.

For the $4 billion Illinois Stat Universities system, Champaign participation in the secondar market fund is part of a large venture capital commitment, it first, said Ken Codlin, chief investment officer. The system wil commit $100 million to Brinso Partners during the next fiv years, of which 20% will go to th secondary market fund; 20% t the First Post-Venture Fund, investing in young public companies; and 60% to traditiona venture capital, with Brinso Partners investing in a variety o venture capital partnerships o the client's behalf.

Venture capital appears to be a good long-term investment, and i isn't a market investors can time Mr. Codlin said. The system wil use its positive cash flow to fun the commitment; if, at some point it no longer has positive cash flow, it will draw funding by reducing its equity position.

General Mills, Minneapolis committed $2 million of its $70 million defined benefit plan asset to the secondary market fund said Daralyn Peifer, manager-benefit finance. "We see secondary interests as an inefficien

See **Venture** *on page 5*

U.N. exec resigns post after 4 years

By Margaret Price

Having steered the $9 billion United Nations Joint Staff Pension Fund through the turbulent late 1980s and most of 1990, Pierre Henchoz, the fund's chief investment officer, was to leave Aug. 31.

Mr. Henchoz will become chief investment officer of Hentsch, Chollet & Cie, a private bank in his native Lausanne, Switzerland. He also will be an adviser and director of Eurovaleur Inc., a European investment program for institutional investors started in June.

A year after Mr. Henchoz arrived at the New York-based United Nations fund in 1986, world stock markets crashed, then perked up again only to face last year's "mini-crash" and now the

See **United Nations** *on page 58*

Pierre Henchoz will return to his native Switzerland.

This former Woolworth's department store in Utica, N.Y., is being converted to office space; several union pension funds, through the 'J for Jobs' accounts, will be providing the mortgage.

REAL ESTATE

'J for Jobs' providing mortgage for Utica office renovation project

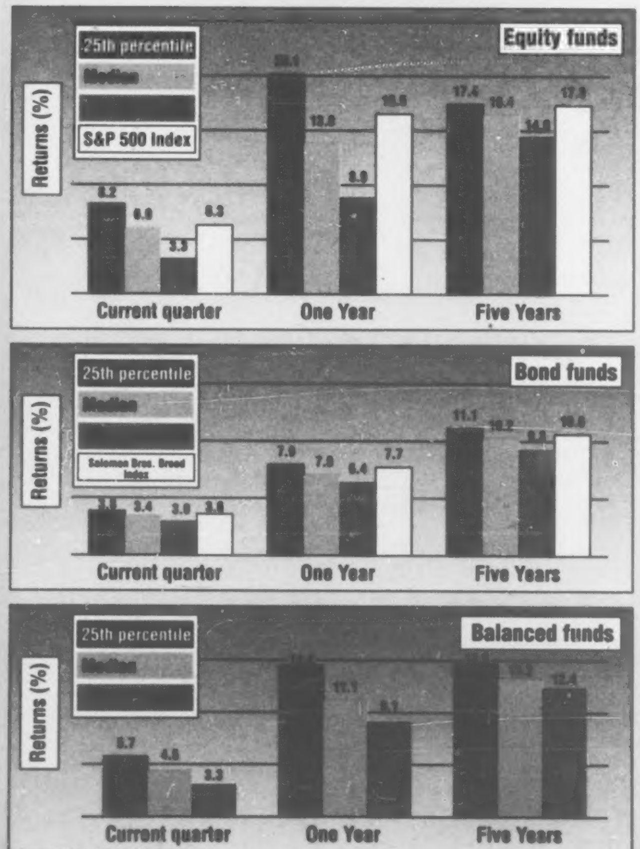
■ The Union Labor Life Insurance Co.'s "J for Jobs" account will provide a $5.2 million mortgage for the conversion to office space of a Utica, N.Y., building that formerly housed a Woolworth's department store.

After renovation, the six-story structure will become the northeast regional headquarters for Stetson-Harza, the architectural and engineering subsidiary of Harza Engineering. The 20-year mortgage will yield 9.75%, and has a call option at years 11 and 16.

"J for Jobs" is a $452.5 million open-end pooled fund that provides mortgage financing for projects built with union-only labor. The account has 177 pension funds invested in it, including four in the new project's jurisdiction: the Operating Engineers Joint Pension Fund and the Central New York Painters and Allied Trades Pension fund, both in Syracuse; the Plumbers and Steamfitters, Local 79 in Utica; and the International Brotherhood of Electrical Workers, Local 181 in Yorkville.

SEI universe performance

(periods ended June 30)



Source: SEI Corp., Wayne, Pa.

Graphic by Holly Seguine

PENSION FUNDS

Another page in the LTV-PBGC saga: 1 plan is 'broke'

■ Officials of The LTV Corp. say one of the three pension plans they've been fighting about with the Pension Benefit Guaranty Corp. is broke.

The Jones & Laughlin hourly plan, the largest of the three plans with $1.6 billion in unfunded liabilities, is "broke," and the company does not have enough cash to fund it, says Julian Scheer, senior vice president for LTV in Washington.

What has been overlooked is that the J&L plan owes the PBGC $219 million for assets advanced to the plan after the agency forced the plan to terminate in January 1987. The plan now has only $104 million in assets.

The assessment of the plan's financial condition follows a U.S. Supreme Court ruling endorsing the restoration by the PBGC of the three plans.

PBGC officials "figured they can prop it (the plan) up for a while and somehow get it jump started," said Frank Cummings, a partner in the Washington law firm of LeBoeuf, Lamb, Leiby & MacRae, which represents Dallas-based LTV.

Meanwhile, upon restoration, the assets advanced to the plan when it was under PBGC trusteeship now represent a loan, he said. The agency does not have legal authority to lend money to an ongoing plan, Mr. Cummings added

But Messrs. Cummings an Schneer would not say what the think the PBGC should do abou the "loan." LTV currently is i negotiations with the PBGC.

Carol Flowe, the PBGC's general counsel, disagreed wit LTV's stance.

She said the advances shoul not be characterized as a loa and noted this is the only cas where pension plans have bee restored.

LTV can afford the plans, M Flowe said, although "it ma mean other creditors will ge less."

JUNK BONDS

Defaults on way to a record year

■ There's more bad news for the already battered high-yield bond market.

Speculative-grade bond defaults are running at a 19-year high, according to Moody's Investors Service. Downgrades also are mounting, another indication of the rising credit problems for thinly protected firms.

And the rating agency warns that highly leveraged companies could face the most severe test as U.S. consumer spending slackens and the possibility of an oil price-triggered recession grows.

In a special report, John Lonski, Moody's senior economist, warned the most vulnerable junk bond issuers may be those with exposure to discretionary consumer spending, especially housing.

Through the first seven months of 1990, Moody's says 29 junk bond issuers defaulted, representing an annualized default rate of 5.8% for speculative-grade issuers. That rate is only marginally above the 5.6% of 1989. But, if maintained, Moody's said it will be the steepest annual rate since the 10.9% rate of 1970.

In dollar terms, Moody's reports that roughly $8.4 billion of junk bonds defaulted during the first seven months, for an annualized default rate of about 6.3% of total junk bonds outstanding at the start of the year. By comparison, in 1989, $9.4 billion of debt defaulted, a 4.9% default rate. During the first seven months of this year downgrades of speculative grade companies have led upgrades by a factor of 4 to 1.

Europe and Henderson
A decade of expansion
HENDERSON

Henderson's tapes are popular with U.K. clients.

MONEY MANAGERS

Firm turns up the volume in U.S.

■ Money manager Henderson International Inc. is using cassette tapes to reach out and touch U.S. pension funds.

The firm sent about 2,000 copies of its first tape, "Europe and Henderson: A Decade of Expansion," to U.S. pension funds and consultants. The package, which included the tape and written materials, describes Henderson itself as well as the firm's bullish outlook on Europe, such as strong markets, "overdone" fears of inflation and 1992-related developments. A second tape is due out this fall; others are planned for about every six months.

Why tapes? "Everybody sends out so much stuff. People don' have time to read it all," said Richard Garland, marketing director. "With these tapes, people ca just pop them into their car cassette . . . and listen to them," h said. "People in the U.K. lik them," he noted. "Henderson wa the first firm to send tapes to U.K pension funds" about 10 years ago

Tapes for U.S. funds are "par of a broad focus on the U.S. market" — a focus that was "steppe up this year," said Mr. Garland The firm currently has two U.S foundations as clients.

A few other firms are said to b using or considering tapes fo marketing. Can stereo headsets b far behind?

INVESTING

Manager is high on aircraft stocks

■ Bill Kapner has high hopes for the commercial aircraft construction business.

Mr. Kapner, managing director of Justin Asset Management in Arlington, Va., expects "powerful returns and phenomenal earnings growth" from that industry, which is controlled by only a few players.

Boeing Co., the leading commercial aircraft manufacturer, is a recent addition to Justin's portfolio. In a report to clients, Ed Hickey, Justin's senior research analyst, said Boeing's rapid earnings growth (earnings per share were up 87% on a 61% sales increase during the first quarter of 1990) will continue.

General Electric Co. also will benefit from the same trends, Mr. Hickey said. GE manufactures the engines on more than half of all commercial jets sold.

Justin is bullish on commercial aircraft manufacturing despite the oil price hikes brought about by the Iraq-Kuwait hostilities. Mr. Kapner acknowledged reduced air travel could last into the fall. "But even after the oil price surge, I still believe firmly in the story."

Bill Kapner believes the sky's the limit for aircraft manufacturing stocks.

Indexers turning deaf ear to risk, prudence

By James R. Hamilton

Illustration by Alan Brunettin

There is a huge investment management problem in the $45 billion New York State Common Retirement Fund that pools the investments of several state and local retirement systems. The problem is the $16 billion of the fund invested to duplicate the performance of the Standard & Poor's 500 Stock Index. It's a problem facing many other pension sponsors, both public and corporate, which are estimated to have $200 billion of assets in equity index funds.

The index fund, which comprises more than a third of the New York fund's total assets, has outperformed the average manager in the recent bull market years. But what of the down years that in all likelihood will come? The comforting thought is advanced that this $16 billion will just "ride up and down with the stock market."

For 15 years, since 1975, the stock market has been riding up. Now, on the eve of a possible recession, let us focus on riding down with the stock market. Are 1973 and 1974 now so long ago that pension sponsors don't remember what it was like to have a prolonged bear market? The S&P 500 fell close to 15% in 1973 and 27% in 1974.

All indexers share one overwhelming characteristic: They have never heard of prudence or of risk. Obviously, they have never heard of anything; they have no ears or brains; they are simply compilers of past prices of one conglomeration of stocks or another. By investing to imitate them, is the system becoming deaf to prudence, at least with respect the the $16 billion invested this way?

What protection does the system's S&P 500 index fund have against a debacle? The answer is none. Under a passive approach, no investment manager will be trying to shift to stocks that will better weather the storm, or to switch to cash equivalents when no stocks look attractive. Active equity managers, on the other hand, will be buying cash equivalents and even government bonds in place of stocks.

What will the system be doing? The staff will be running their computer programs to exactly match the decline. The investment objective of an index fund is to match the index, not to make money.

The index strategy was adopted partly out of necessity because the system's small staff cannot manage that much stock internally. We may imagine these indexers, along with those at other pension funds, aren't oblivious to the danger of a decline, but damage control mechanisms have proven ineffective.

In reaction to the fear of a steep decline, some indexers adopted portfolio insurance and tactical asset allocation models. Following the October 1987 stock market crash, portfolio insurance was largely abandoned. Judging from results to date, tactical asset allocation, really nothing but market timing, is headed for a similar fate.

So what to do? A large part of the system's investment problem is its fund's unwieldy size and continuing growth; its $45 billion could be $100 billion by 1995. If indexation continues, it will have frozen even more of the assets into the "ride up and down with the stock market" mode.

My proposal is to separate its equity investment operations into at least 10 pools to be supervised by 10 joint boards similar to those of private Taft-Hartley funds, which are trusteed jointly by unions and management. Each of these would compete in the investment world as a separate entity. Almost certainly the combined results would be both more productive and less risky than the present arrangement. I would expect much less use of index funds, and that more intelligence and judgment would be applied to the decision-making. Put another way: prudence would be restored to investing more than one-third of the system's assets.

The results of all these sub-funds would be pooled and the result of the system as whole would be a blend of their individual results. Outstandingly successful results could be studied and the lessons learned conveyed to the other elements; in effect, it's a federal system of investment management comprising 10 "states."

The state comptroller, who now is the sole trustee of the fund, would be a member of each board to provide insight derived from a central overview of the whole system. The proposed system would retain what is good in the present one: a single decisive trustee, accountable to beneficiaries as a fiduciary and to the ultimate sponsors, the taxpayers.

The joint boards would provide many more opportunities to involve public employees, private individuals and state executives, whether appointed by the comptroller or governor or elected by the unions.

There is experience in virtually every corner of the country showing that the power of educated, interested and energetic people can be harnessed to improve the results organizations that have previously been managed through traditional hierarchies. In the highly entrepreneurial field of investment management, and particularly for the tens of billions in the system, the effect should be especially striking. ▪

On Nov. 21, 1989, when the Standard & Poor's 500 Stock Index was headed for record highs, James R. Hamilton, president, Hamilton & Co., New York, addressed the New York State AFL-CIO Public Employees Conference in Albany. His commentary is excerpted from that speech.

LETTERS TO THE EDITOR

Time a precious commodity

■ "Don't call us, we'll be calling you," (*Pensions & Investments*, June 25) was a rather unflattering piece about National Steel Corp.'s attempt to keep interested parties informed on current pension activities. For the record, at National we are very interested in "(talking) about asset allocation, investment strategies or anything else." However, time does not allow for answering 40 to 50 daily calls directly.

While a few prospective investment managers or others have been forced to write a letter (or an article) to get my attention, nearly all have lauded the voice mail concept as an effective time management tool. As I see it, my job as pension manager is to direct the investment activities of the pension fund and to talk to people on an "as needed" basis. I am confident that the pension committee and, more importantly, the plan beneficiaries, share this view.

James L. Wainscott
Manager-pension and
lease administration
National Steel Corp.
Pittsburgh

Editors note: The item was not meant to be "unflattering." We applaud National Steel's effort to give as well as get information through its voice mail system.

British fund run in-house

■ In the June 25 special report profiling the 25 largest non-U.S. pension funds, I noticed the details for the Electricity Supply Pension Scheme are incorrect.

The implication is the scheme is managed by outside advisers. In fact, the scheme is managed in-house by ESN Investment Management Ltd. and ESN Property Management Co. Ltd. The companies named in your article are advisers to the trustees and not managers of the fund.

I would add that our U.S. property is managed by our wholly owned subsidiary, Eastern Realty Investment Corp., whose president and chief executive officer is Christopher J. Whyman, working out of Washington, D.C.

M.B. Cannan
Chief Executive
Electricity Supply Pension Scheme
London

Not transferable

■ "In addition, the plan sponsor must be comfortable with the fiduciary burden assumed in taking on this responsibility rather than delegating it to a full-time external specialist."

This statement was contained in a June 25 Letter to the Editor from Peter S. Bowles, president, Fiduciary Capital Management, Woodbury, Conn. Surely Mr. Bowles must realize that plan sponsors cannot delegate their fiduciary responsibilities. Therefore, implying that hiring full-time external specialist somehow relieves plan sponsors of fiduciary responsibility is irresponsible and could lull them into a false sense of invulnerability.

Leslie D. Gubkin
Assistant secretary
Hartford Life Insurance Cos.
Simsbury, Conn.

Security Pacific rechauffe

■ Please note the following corrections for the profile of Security Pacific Investment Group Inc. published in the May 21 issue.

Edward G. Hartmann is the chief executive officer of Security Pacific Investment Group Inc. J. Michael Gaffney is the chairman, chief executive officer and chief investment officer-fixed income of Security Pacific Investment Managers Inc.; Robert U. Sandroni is president and chief investment officer-equities.

The fixed-income management approach of Pacific Century Advisers Inc. uses convertible securities in a bottom-up selection process driven by earnings, existing debt and cash flow.

Norman J. Wohlken
Senior vice president
Director of marketing
Security Pacific Investment Group
Los Angeles

Goldman Sachs' $1 billion

■ The foreign institutional assets managed by Goldman Sachs Asset Management were underreported in the July 23 survey.

The correct figure should be $1.001 billion. The published figure included separate accounts only; the revised number is both separate and commingled accounts.

Doni L. Fordyce
Vice president
Asset Management Division
Goldman, Sachs & Co.
New York

A woman sunbathing

■ I am generally not one to comment on editorial cartoons, however, the cartoon in the July 23 issue was disturbing to me.

Mr. Schillerstrom's opinion could have been expressed in ways other than the childish and demeaning prank of a water balloon tossed on a woman sunbathing.

I am disappointed that you and your staff did not use or suggest a different illustration.

Collier W. Case
Manager employee benefits
KPL Gas Service
Topeka, Kan.

Traders show they can be 'spacey' types

Samplings from the program of a three-day Trader's World Conference at the Midland Hotel in Chicago in June, and accompanying testimonies of attendees, present disturbing news for those who leave out of their fundamental time-series analyses the macro forces of the cosmos or use English as a familiar language.

Among the topics and speakers were:

"How to use planetary harmonics to increase your probability of success in the markets . . ." Larry Pesavento, president, Astro-Cycles; and

"Using astrological cycles to increase profits," by Robert Hand, Astrolabe.

Sound value-adding? Unedited testimony from identified attendees at its last conference endorsing the educational experience perhaps unwittingly offer evidence there are indeed, as trader's put it, no-brainers:

• "Thanks for going to the trouble of putting this conferece together. I am so excited to have a change to meet other people."

— W. Alive

• "I enjoyed the conference. It was the best one have attended in years."

— R. Carlson

• ". . . You are to be commended to doing an outstanding job."

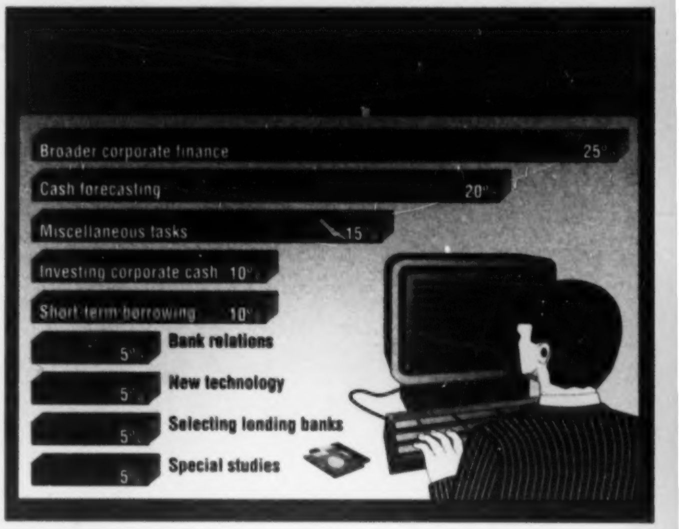
— M. Riley

• "The seminar was great — I'll try to brind frends next time."

— N. Name.

Executives expand duties

Financing, forecasting requiring more time



By Fred Williams

Traditional cash management seems to be merging into overall treasury management as corporate treasury managers spend more of their time in such areas as cash forecasting and corporate finance activities.

Gone are the distinct limits that used to separate cash management from corporate finance, results from *Pensions & Investments*' 1990 Cash Management Survey show.

Indeed, respondents to this year's survey are doing what, last year, they predicted they would. In *P&I*'s 1989 survey, for example, treasury officials anticipated they would spend more time on cash forecasting in 1990 and less time on short-term borrowing.

This year, corporate treasury managers reported cash flow forecasting accounted for 20% of their time in the 12 months ended June 30, 1990. That's up from 17% in 1989. And they said short-term borrowing takes 10% of their time, down from more than 15% last year.

Other key findings from the survey:

- The use of hedging of borrowings against potential rate volatility has risen dramatically, to 31% from 11% in 1989.
- Nearly 30% of the respondents indicated they do not use benchmarks when investing corporate cash, up from 25% last year.
- Some 57% of respondents use electronic funds transfer to receive payments from customers, up from 45% in 1989.
- Controlled disbursement and lockbox services were cited as bank services that have become more competitively priced this year. But the next most frequent response was "none." Prices for bank wire transfers, account maintenance and balance reporting fees have increased, the respondents said.
- Increasing costs for banking and cash management services are a growing problem for treasury managers.

More than 60% of the respondents said troubles in the banking industry have caused them to review the solvency of their banks more closely. More than 20% said bank mergers have adversely affected cash management services.

The 1990 survey also showed the move toward treasury managers paying bank charges with fees, rather than with compensating balances, is leveling off.

In 1990, more than 60% of respondents said they pay with fees, the same percentage as in 1989.

Corporate financial executives have found they can save money by not maintaining large balances to pay bank charges.

Only 34% (vs. 45% last year) said they are satisfied with the performance benchmarks used to evaluate short-term investment staff and outside management. Another 30% indicated their benchmark could be improved. And a surprising 29% said they don't use a benchmark to measure the performance of their short-term investments.

George Delaney, president of L.M. Delaney Co., a Sewickley, Pa., cash management consulting firm, said the absence of a benchmark by such a sizable percentage indicates the lack of understanding and concern for cash as an asset. He said companies are "leaving money on the table" by not paying more attention to their short-term investments.

"I'm not surprised that people aren't pegging themselves to anything," he said. "If no one knows what's going on then no one can appraise their performance. Many of them probably don't know what they are earning. They don't have a system where they can measure and calculate their returns and focus almost entirely on liquidity. They demand five- or six-day liquidity when they may need 30 days."

Hedging of short-term borrowing has picked up dramatically since last year. But while 31% said they now hedge borrowings, 47% said they have never hedged.

Of those who do or plan to hedge, an average of 38% of borrowings have or will be hedged.

Mr. Delaney said the increased use of hedging probably indicates treasury managers feel "less secure about constant rates and may have or be expecting more volatile interest rates, up or down, but wanted protection in the event volatility went against them."

See **Duties** *on page 21*

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Duties

Continued from page 19

He said since many treasury officials are in the market almost continuously, they hedge themselves against the rising cost of money. If rates drop, "they would just be out the cost of the hedge."

The average daily investible cash position for survey respondents was $97.5 million. And, as in previous surveys, most of the cash is invested by internal staff (84%), with only 4% saying they plan to hire outside investment managers in the next 12 months.

Most respondents (82%) said their companies have written investment guidelines with safety, liquidity and yield the most frequently listed investment requirements.

When asked to name two issues that will be of major importance to cash management in the next one to two years, most corporate treasury managers picked the continued development of electronic data interchange to process orders and payments electronically.

Other issues mentioned frequently include:

- The risks and liabilities associated with electronic funds transfer;
- The potential pricing of daylight overdrafts by the Federal Reserve Board;
- Continued bank mergers and consolidation of services;
- Proposed new postal regulations that could delay collections in some lockbox locations;
- Foreign exchange and global cash management; and
- The impact of rising Federal Deposit Insurance Corp. premiums that safeguard deposits.

The FDIC expects to raise premiums paid by commercial banks nationwide by three basis points next year. Some industry experts expect the hike to be closer to the 7.5-basis point ceiling allowed by Congress.

The insurance fund was established during the Depression, and now is widely regarded as underfunded.

Last year, banks paid premiums of 8 cents for every $100 in assets. That rate was raised to 12 cents this year and is scheduled to rise to 15 cents in 1991. ■

Support

Continued from page 20

pected risks. It presents and analyzes hedging alternatives and-strategies that reduce costs without increasing risk. Once a strategy has been employed, it tracks and monitors the positions and provides full profit and loss accounting on the exposures, the hedges and the net positions.

The product offers techniques that minimize risk across a basket of assets and liabilities. The software can determine which hedging instruments, and how much of each instrument, should be used to minimize risk for a linked portfolio. Many exposures can be hedged simultaneously.

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Bank mergers come up short

Bucking conventional wisdom, a new study shows bank mergers and acquisitions rarely produce the economies much heralded by the players to win the support of regulators and shareholders for these arranged marriages.

Most banks typically expect to reduce expenses by 50% or more at the time of the merger, but actual savings averaged only 35%, according to the study conducted by Ernst & Young and Keefe, Bruyette & Woods Inc., both in New York. Mergers of equals produced economies of only 15%, compared to as much as 50% for acquisitions.

The two firms surveyed 34 of the largest banks nationwide with the aim of helping bankers target realistic cost reductions.

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Based on performance of Institutional Bond Fund through 12/31/89. Source: SEI

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Separate accounts top commingled funds

P&I survey finds tax-exempt real estate assets up 14%

By Steve Hemmerick

Separate accounts have overtaken commingled funds as the investment of choice for tax-exempt real estate investors, a *Pensions & Investments* survey shows.

Tax-exempt assets in separate real estate accounts jumped 28.8% in the year ended June 30, to $65.064 billion from $50.5 billion a year earlier. Tax-exempt assets in commingled funds, on the other hand, increased only 2.3%, to $64.357 billion from $62.9 billion during the same period.

Until now, assets in commingled funds had exceeded those in separate accounts, although the gap had been narrowing for several years.

The *P&I* survey, based on responses from 105 real estate money managers, also showed all tax-exempt assets in real estate — equity, hybrid debt and mortgages — increased 14.1%, to $129.421 billion as of June 30 from $113.413 billion a year earlier.

Commingled funds for real estate date back to 1970, and became popular in the late 1970s and early '80s. They were seen as a way for investors to enter the real estate market with small investments that could be spread among several commingled pools in the hopes of achieving diversification. They began with open-end funds, many of which now are thought of as being core real estate investments. Then, as investors' knowledge of, and comfort with, real estate as an asset class increased, they moved to closed-end funds and, finally, to separate accounts.

Both types of commingled real estate funds appear to be less popular.

The increase in assets flowing to closed-end real estate funds is declining, according to Paul Saint-Pierre, president of Pension Realty Advisors, a San Francisco-based real estate consulting firm.

In the first half of 1988, investors contributed $2.3 billion to closed-end funds. In the first half of 1989, contributions to closed-end funds dropped as investors put $1.7 billion in assets in them.

In the first half of 1990, the decline became even more dramatic. Investors put only about $500 million in closed-end real estate funds, said Mr. Saint-Pierre.

"The investment activity to closed-end funds is really tailing off very quickly," he said.

One problem, he said, is that many investors feel an overwhelming uncertainty about the level and direction of real estate values.

Pension fund executives have complained that in a commingled real estate fund, they have little control over the money manager or the fund's assets when they think change is needed. They also have expressed frustration with the appraisal method used to value properties in commingled funds. And values determine fees paid to commingled fund real estate advisers.

There's also been a sharp exodus from some open-end funds. Investors have sought to withdraw more than $1.9 billion from open-end commingled real estate funds (*P&I*, Aug. 6), and other open-end funds are in client-induced liquidation.

Consultants say larger public funds — which have moved into real estate only in the past few years — are part of the reason for the sharp increase in tax-exempt assets in separate accounts. Larger pension funds often prefer separate accounts, and make big enough investments to provide adequate diversification in their real estate portfolios.

Regardless of the vehicle, tax-exempt investors continue to invest in real estate.

Equity and hybrid debt real estate assets held by the managers surveyed increased almost $15 billion during the year ended June 30. (Since many investors and real estate professionals regard mortgages as more of a fixed-income investment than a real estate one, mortgages were excluded from these calculations.)

When adjusted for market appreciation of 2.5% — a number consultants generally agree on for the market appreciation of equity real estate and hybrid debt for the year ended June 30 — tax-exempt equity and hybrid debt assets under management still grew about $12.3 billion.

Using a 7.3% median return on real estate equity and hybrid debt that consultants generally agree on for appreciation plus income, the amount of new cash in real estate investing would be even smaller. Had last year's real estate equity and hybrid debt assets returned 7.3%, they would have grown to $115.9 billion from $108.02 billion during the year. Adjusted for that return, that would mean new investments in real estate equity and hybrid debt during the year totaled slightly more than $7 billion.

During the one-year period, tax-exempt assets in equity real estate increased 15.8%, to $104.363 billion from $90.145 billion. Tax-exempt assets in hybrid debt rose only 4.1%, to $18.607 billion from $17.875 billion, while tax-exempt investments in mortgages increased 21.9%, to $6.451 billion from $5.292 billion a year earlier.

Based on an estimated $2.57 trillion in institutional tax-exempt assets held as of June 30, tax-exempt investors have about 4.8% of assets in real estate equity and hybrid debt, or 5% in real estate including mortgages.

P&I's annual survey of real estate money managers also showed:

- The amount of tax-exempt money awaiting investment grew a whopping 52.1% during the year ended June 30. Tax-exempt contributions received but not invested were $3.019 billion as of June 30, up from $2.5 billion a year earlier. Commitments not yet received were $13.253 billion, up from $8.2 billion a year earlier.
- More tax-exempt real estate assets are being funneled into residential multifamily properties and less traditional property investments like mobile homes and land.

The investment in multifamily housing increased more than two percentage points to 11.1% from 9% the previous year. And the amount in other or less traditional real estate investments has increased to 13.9% from 12%, the survey shows.

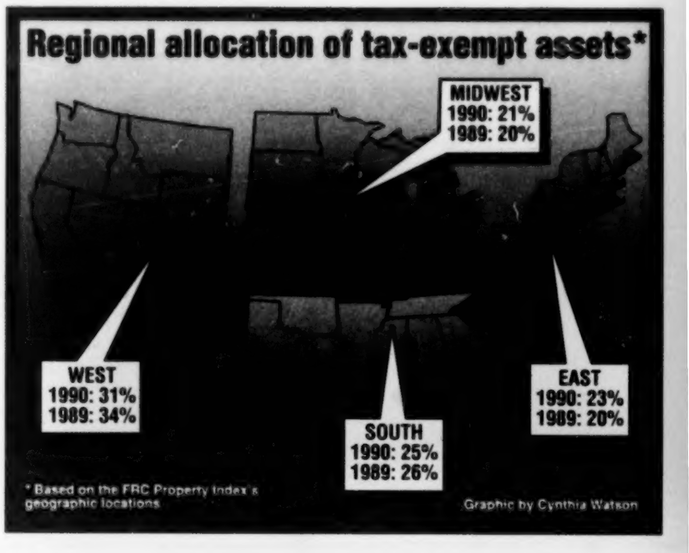
- The amount of assets invested for non-U.S. clients increased 17.2% during the year, to $19.654 billion from $16.768 billion. Total assets invested in non-U.S. properties rose 16.4%, to $9.739 billion as of June 30 from $8.367 billion a year earlier. Tax-exempt assets in non-U.S. properties were $5.491 billion as of June 30; this question was not asked last year.
- In aggregate, tax-exempt assets were 88.6% invested in existing properties and 11.4% in developmental properties as of June 30.
- Taxable and tax-exempt assets in real estate totaled $343.238 billion as of June 30, up 5.1% from $326.584 billion a year earlier.
- Among *P&I*'s Top 10 managers ranked by tax-exempt assets, LaSalle Advisors Ltd., Chicago, moved up to sixth place this year from eighth last year. LaSalle's tax-exempt assets under management grew 41.5%, to $5.115 billion as of June 30 from $3.616 a year earlier.

The RREEF Funds, San Francisco, dropped to 10th place from seventh, though its tax-exempt assets under management increased 9.3% during the year ended June 30. The bulk of the growth came from the addition of $60 million in hybrid debt assets; last year, RREEF reported managing only equity real estate.

JMB Institutional Realty Corp., Chicago, saw its tax-exempt equity assets increase 28.8% during the year, to $11.127 billion from $8.638 billion. Tax-exempt equity assets of Heitman Advisory Corp., Chicago, rose 16.2%, to $6.5 billion from $5.596 billion.

- JMB, with $11.338 in tax-exempt assets under management, is inching up on Equitable Real Estate Investment Management, New York, which for several years has had the distinction of managing more tax-exempt real estate assets than any other firm.

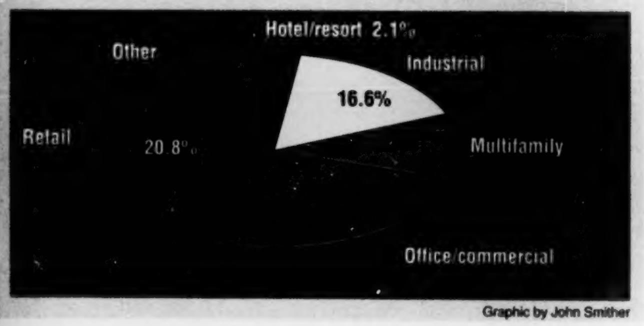
Equitable's tax-exempt assets under management stood at $11.601 billion as of June 30, up 13.5% from $10.225 billion a year ago. JMB's tax-exempt assets rose 28.8% during the same period. ■


Regional allocation of tax-exempt assets*

* Based on the FRC Property Index's geographic locations

Graphic by Cynthia Watson

Aggregate tax-exempt property mix



Graphic by John Smither

Advisers plant farmland seeds

By Terry Williams

Investment vehicles that aim to capture increasing farmland values are seeking to raise more than $300 million from pension funds.

So far, two money managers claim to have more than $70 million in commitments between them.

For the most part, however, pension funds have moved cautiously toward farmland. They have expressed interest, but few have committed money.

One pension fund particularly sanguine about investing in farmland is the $2.3 billion fund of Owens-Illinois Inc., Toledo, Ohio.

The pension fund has invested an estimated $15 million in farmland over nine years, through the closed-end Heartland Group Trusts I, II and III, sponsored by American Agricultural Investment Management Co. Inc., Lombard, Ill.

During that period, the Owens-Illinois pension fund paid a high of $3,800 an acre for farmland and a low of $1,800 an acre, according to Ronald C. Boller, corporate vice president and director-benefits finance.

"We dollar-averaged in," said Mr. Boller. "The first land we paid two times per acre what we got it for later."

Owens-Illinois likes farmland as a long-term investment.

"We want long-term ownership," he said. "We look on it as a good asset class."

He noted, however, there aren't many of his counterparts investing in the property type.

H. Joseph Bourne, president of American Agricultural Investment, said four pension funds he wouldn't identify are in the final stages of making an aggregate $30 million commitment to Heartland Group Trust IV, a closed-end fund with a target of $100 million.

Two U.S. corporate pension funds have committed more than $50 million to separate accounts run by Batterymarch: Agrivest, Glastonbury, Conn., according to Jim McCandless, executive vice president. He declined to identify the funds. The manager also is launching a commingled fund

See **Farmland** *on page 40*

How information was gathered

Data for the real estate investment managers directory were gathered from questionnaires.

More than 300 managers were sent questionnaires and asked about such topics as tax-exempt and total assets under management; breakdowns among equity real estate, hybrid debt and mortgage investments; and the geographic and property mix of the tax-exempt assets.

Firms also were asked to provide a brief description of any open-end commingled funds and closed-end funds still open for subscription.

The tables that appear in the directory are based on the responses from the 105 participating firms, which are listed on page 24. The top 50 firms ranked by tax-exempt assets in property investments are profiled beginning on page 25.

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Real estate investment advisers ranked by tax-exempt assets

	Tax-exempt assets ($ mils.)					Taxable/tax-exempt assets ($ mils.)			
	Total	Equity	Hybrid debt	Mortgages	Fully discretionary	Total	Equity	Hybrid debt	Mortgages
1 Equitable Real Estate	11,601	11,190	135	276	11,601	35,982	23,768	1,310	10,904
2 JMB Institutional Realty *	11,338	11,127	211	-	10,574	11,869	11,658	211	-
3 Copley Real Estate Advisors	9,070	9,070	-	-	8,909	16,019	16,019	-	-
4 Heitman Advisory	6,500	6,500	-	-	4,680	6,500	6,500	-	-
5 Prudential Real Estate	5,489	5,219	125	145	5,397	39,035	13,539	218	25,278
6 LaSalle Advisors	5,115	5,115	-	-	2,980	5,115	5,115	-	-
7 Aetna Life	5,066	3,465	1,231	370	4,237	30,525	5,574	1,252	23,699
8 Aldrich, Eastman & Waltch	4,320	995	2,765	560	1,980	4,540	1,135	2,845	560
9 Yarmouth Group	4,290	3,880	410	-	2,160	7,510	7,100	410	-
10 RREEF Funds	4,045	3,985	60	-	3,367	4,115	4,055	60	-
11 TCW Realty Advisors	3,904	3,269	635	-	2,211	3,904	3,269	635	-
12 Alex. Brown Kleinwort Benson	3,722	1,935	1,573	214	401	3,745	1,958	1,573	214
13 GE Investments	3,676	2,998	257	421	3,676	3,676	2,998	257	421
14 Corporate Property Investors	2,868	2,868	-	-	2,868	4,700	4,700	-	-
15 Boston Co. Real Estate	2,723	885	1,838	-	1,202	2,723	885	1,838	-
16 Jones Lang Wootton	2,250	2,208	42	-	661	2,250	2,208	42	-
17 J.P. Morgan Investment	2,125	606	1,519	-	2,015	2,256	660	1,596	-
18 CIGNA Investments	1,894	1,731	158	5	1,245	14,304	2,708	1,267	10,329
19 Lehndorff & Babson	1,830	1,662	168	-	858	3,673	3,483	190	-
20 Balcor	1,792	332	1,435	25	-	4,411	2,951	1,435	25
21 O'Connor Group	1,769	1,644	125	-	900	2,113	1,988	125	-
22 Trammell Crow Realty Advisers	1,750	1,750	-	-	1,350	17,300	17,300	-	-
23 Sentinel Real Estate	1,717	1,717	-	-	1,417	2,039	2,039	-	-
24 McMorgan	1,615	260	255	1,100	1,615	1,615	260	255	1,100
25 Latimer & Buck	1,391	268	443	680	700	1,391	268	443	680
26 Wells Fargo Realty	1,316	78	1,237	1	901	1,401	291	1,109	1
27 MIG Cos	1,237	636	406	195	491	1,237	636	406	195
28 Metropolitan Life	1,206	1,148	-	58	1,181	24,809	11,659	-	13,150
29 Karsten Realty Advisors	1,111	816	-	295	1,111	1,231	936	-	295
30 Invesco Realty Advisors	1,028	-	863	165	50	1,028	-	863	165
31 Coldwell Banker Commercial	1,004	961	37	6	763	1,004	961	37	6
32 Mellon McMahan Real Estate	995	657	338	-	995	1,060	722	338	-
33 Kennedy Associates	992	727	246	19	198	992	727	246	19
34 John Hancock Financial	988	979	-	9	-	15,504	2,404	-	13,100
35 L.J. Melody	922	83	431	408	-	2,521	100	890	1,531
36 Cabot, Cabot & Forbes	900	900	-	-	900	900	900	-	-
37 Property Capital Associates	854	854	-	-	854	854	854	-	-
38 NCNB Nat'l Bank	847	781	66	-	804	847	781	66	-
39 PSI Institutional Realty	758	758	-	-	-	3,233	2,950	-	283
40 ASB Capital Mgmt	632	471	161	-	80	632	471	161	-
41 Metric Institutional Realty	616	579	21	16	304	2,370	2,333	21	16
42 FS Realty Partners	575	477	97	1	-	575	477	97	1
43 Dreyfus Realty Advisors	574	538	36	-	200	574	538	36	-
44 Eastdil Realty	554	405	17	132	380	3,990	1,628	2,230	132
45 Citicorp Real Estate	542	404	-	138	341	718	580	-	138
46 Phoenix Mutual	502	202	300	-	502	2,502	852	450	1,200
47 Schroder Real Estate	500	500	-	-	300	1,300	1,300	-	-
48 State Street Bank (m)	500	300	200	-	500	500	300	200	-
49 Union Labor Life	453	-	-	453	34	453	-	-	453
50 Piedmont Realty Advisors	422	162	260	-	422	422	162	260	-
51 Bennett & Kahnweiler	421	359	62	-	317	421	359	62	-
52 Meyer Real Estate Advisors	408	363	27	18	50	523	478	27	18
53 Frank Russell Trust (m)	401	401	-	-	401	401	401	-	-
54 PMRealty Advisors	373	373	-	-	373	485	468	-	17
55 First Wachovia	364	364	-	-	364	383	383	-	-
56 Sierra Capital	355	355	-	-	351	623	623	-	-
57 AFL-CIO Housing Trust	319	-	-	319	319	319	-	-	319
58 AMB Institutional	308	282	26	-	208	1,194	1,168	26	-
59 T. Rowe Price Realty	306	280	26	-	306	306	280	26	-
60 Grubb & Ellis Realty	290	275	9	6	56	762	739	12	11
61 Garrett Realty Advisors	272	245	-	27	15	272	245	-	27
62 Mid Atlantic Realty	261	261	-	-	21	261	261	-	-
63 FFCA Institutional	259	172	87	-	259	1,194	932	262	-
64 Coventry Realty Advisors	250	250	-	-	-	280	280	-	-
65 Capital Consultants	223	64	64	95	222	245	64	64	117
66 RCB Trust (m)	210	210	-	-	210	210	210	-	-
67 Angeles Institutional	207	207	-	-	207	1,353	1,353	-	-
68 Hart Advisors	207	140	24	43	-	207	104	24	43
69 Resource Investments	195	195	-	-	195	195	195	-	-
70 First Nat'l Bank of Boston	189	119	-	70	189	189	119	-	70
71 1345 Realty Corp.	180	180	-	-	80	180	180	-	-
72 Acquest Capital	175	34	136	5	-	208	38	149	21
73 Woodmont Realty Advisors	163	163	-	-	-	500	500	-	-
74 Birtcher Realty Advisors	159	159	-	-	69	1,162	1,162	-	-
75 Loeb Partners Realty	150	150	-	-	-	800	800	-	-
76 Devon Institutional Realty	146	146	-	-	146	146	146	-	-
77 K.S. Sweet Associates	146	146	-	-	-	705	705	-	-
78 Wellington Real Estate	145	-	145	-	-	145	-	145	-
79 Bear Stearns Realty	135	135	-	-	135	135	135	-	-
80 Lincoln Asset Mgmt.	135	135	-	-	100	135	135	-	-
81 Principal Mutual	133	133	-	-	133	10,917	217	-	10,700
82 Dusco	122	122	-	-	-	236	236	-	-
83 Rocky Mountain Investors	120	40	-	80	120	120	40	-	80
84 Equitec Institutional Realty	110	110	-	-	110	1,500	1,500	-	-
85 MONY	104	42	-	62	42	6,800	1,400	-	5,400
86 Batterymarch/Agrivest	100	-	100	-	100	370	150	-	220
87 Lieberman Cos.	100	80	-	20	100	100	80	-	20
88 First Asset Realty	92	92	-	-	92	92	92	-	-
89 Aegon USA	70	70	-	-	-	1,300	280	-	1,020
90 Baring Institutional Realty	69	69	-	-	36	804	804	-	-
91 Forest Investment	69	69	-	-	42	69	69	-	-
92 Citizens and Southern Trust	43	30	-	13	27	43	30	-	13
93 Harris Trust & Savings Bank	42	42	-	-	42	45	45	-	-
94 Manufacturers Nat'l Bank-Detroit	30	30	-	-	30	150	150	-	-
95 Equitable Agri-Business	25	25	-	-	25	2,263	91	-	2,172
96 Lepercq Realty Advisors	25	25	-	-	25	440	440	-	-
97 Boatmen's Trust (m)	17	16	-	1	-	17	16	-	1
98 American Agricultural	14	14	-	-	14	23	23	-	-
99 First Wisconsin Trust	13	12	-	1	-	20	20	-	-
100 Morrison, Karsten, Ramzy & Arthur	11	11	-	-	-	27	27	-	-
101 CGR Advisors	-	-	-	-	-	1,960	1,720	-	240
102 Chesterton International	-	-	-	-	-	415	326	85	4
103 Eastern Realty	-	-	-	-	-	297	271	-	26
104 Jacques & Kurdziel	-	-	-	-	-	450	450	-	-
105 Morguard Investments	-	-	-	-	-	2	2	-	-
Total	**129,421**	**104,363**	**18,607**	**6,451**	**92,735**	**343,238**	**194,751**	**24,054**	**124,433**

* An additional $14 billion in total assets is managed by an affiliate, JMB Realty.
(m) Manager of managers; assets not included in totals.

Aetna Life Insurance Co.
151 Farmington Ave., Hartford, Conn. 06156; (203) 273-0123

Tax-exempt real estate assets	$5,066,000,000
Equity	$3,465,000,000
Hybrid debt	$1,231,000,000
Mortgages	$370,000,000
Commingled or pooled funds	
Equity	$2,698,000,000
Hybrid debt	$1,097,000,000
Direct, separate accounts	
Equity	$928,000,000
Mortgages	$343,000,000
Total real estate assets	$30,525,000,000
Equity	$5,574,000,000
Hybrid debt	$1,252,000,000
Mortgages	$23,699,000,000

As of June 30, Aetna Life Insurance Co. had $5.066 billion in U.S. institutional tax-exempt real estate assets, of which $4.237 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $2.899 billion as of June 30. Contributions received but not invested were $96 million; contributions committed but not received were $470 million.

Of the total assets under management, $340 million was invested for non-U.S. pension funds.

Of the U.S. tax-exempt assets, 91% was in existing and 9% in developmental properties. The property mix was 3% hotel/resort, 21% industrial, 22% multifamily housing, 34% office/commercial, 19% retail, and 1% land. The geographic mix was 41% West, 12% Midwest, 29% East and 18% South.

The firm offers open- and closed-end commingled funds, including closed-end specialty accounts, open-end participating mortgage accounts, single property and individual separate accounts.

The Real Estate Separate Account, an open-end fund, has contributions received and invested of $1.656 billion and contributions received but not invested of $65 million for 258 participants. The fund consists of an aggressively managed, equity core portfolio, designed to offer consistent real estate returns. Long-term downside risk is limited by the acquisition of existing, well-leased properties, properties with expansion or rehabilitation potential, and forward commitments on to-be-built properties. The current acquisition strategy emphasizes larger, existing retail, industrial and apartment properties.

The Participating Mortgage Separate Account, an open-end fund, has contributions received and invested of $956 million and commitments received but not invested of $15 million from 232 participants. The fund is broadly diversified by property type and geographic region. Investments include mortgage interests, land underlying commercial income-producing property, and acquired properties that previously were mortgage investments. The current emphasis for acquisitions is on existing, well-leased industrial, apartment and office properties.

Union Separate Account, also an open-end fund, has contributions received and invested of $83 million and contributions received but not invested of $41 million from 29 participants. The diversified account invests in union-built, high-quality properties in areas of high economic growth on a participating mortgage basis. The emphasis is on retail, apartment and industrial properties.

The Union Residential Mortgage Account, a new open-end fund, has contributions committed but not received of $10 million from one client. The fund will invest in residential first mortgages on newly constructed one- to four-family, union-built properties. Investments will be targeted in specific regions based on the client's preference.

The Warehouse Fund is a new, closed-end fund that will invest in warehouse and distribution facilities. Holdings will be structured as wholly owned or joint ventures and located in narrowly defined regions of targeted metropolitan areas.

The parent is Aetna Life and Casualty. Aetna Realty Investors Inc. is the realty subsidiary.

Alan M. Connor is in charge of making equity real estate investments. Raymond E. Smith is in charge of making mortgage financing investments. John E. Arant III is the client contact.

Aldrich, Eastman & Waltch
225 Franklin St., Boston, Mass. 02110; (617) 261-9000

Tax-exempt real estate assets	$4,320,000,000
Equity	$995,000,000
Hybrid debt	$2,765,000,000
Mortgages	$560,000,000
Commingled or pooled funds	
Equity	$300,000,000
Hybrid debt	$200,000,000
Direct, separate accounts	
Equity	$695,000,000
Hybrid debt	$2,565,000,000
Mortgages	$560,000,000
Total real estate assets	$4,540,000,000
Equity	$1,135,000,000
Hybrid debt	$2,845,000,000
Mortgages	$560,000,000

As of June 30, Aldrich, Eastman & Waltch Inc. had $4.32 billion in U.S. institutional tax-exempt real estate assets, of which $1.98 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $995 million as of June 30.

Of the total assets under management, $25 million was invested for non-U.S. clients.

Of the U.S. tax-exempt assets, 87% was in existing and 13% in developmental properties. The property mix was 2% hotel/resort, 12% industrial, 7% multifamily housing, 33% office/commercial, 37% retail, and 9% operating development companies. The geographic mix was 31% West, 15% Midwest, 42% East, and 12% South.

The firm offers closed-end funds, separate accounts, specialized investment funds and commercial mortgage accounts.

John A. McDonough is client contact.

The consultants directory will be published Nov. 12.

ASB Capital Management
655 15th St. N.W., Suite 800, Washington, D.C. 20005; (202) 383-6300

Tax-exempt real estate assets	$632,000,000
Equity	$471,000,000
Hybrid debt	$161,000,000
Commingled or pooled funds	
Equity	$61,000,000
Hybrid debt	$19,000,000
Direct, separate accounts	
Equity	$410,000,000
Hybrid debt	$142,000,000
Total real estate assets	$633,000,000

As of June 30, ASB Capital Management Inc. had $632 million in U.S. institutional tax-exempt real estate assets, of which $80 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $288 million. Contributions received but not invested were $64 million; contributions committed but not received were $119 million.

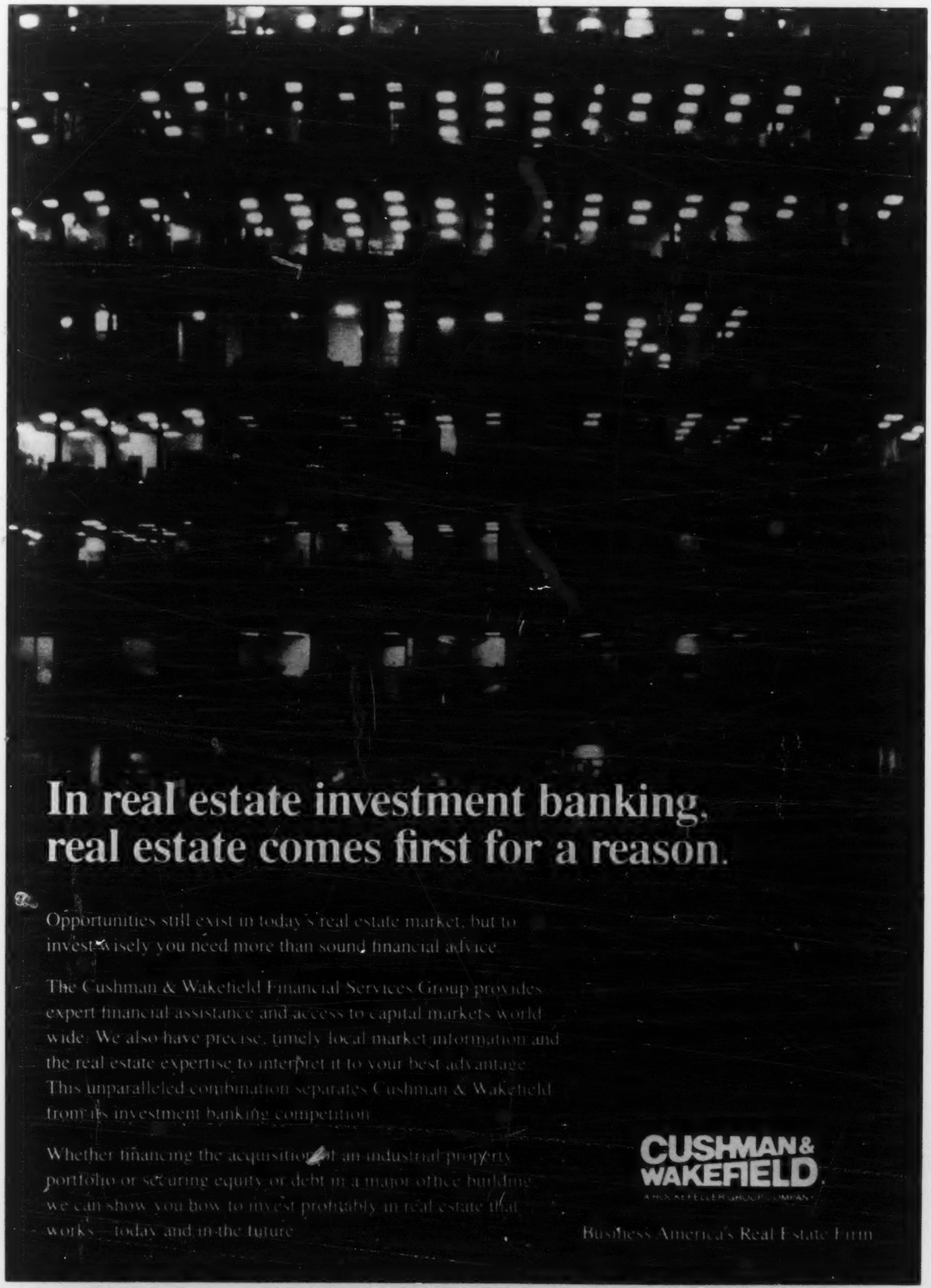
Of the U.S. tax-exempt assets, 78% were in existing and 22% in developmental properties. The property mix was 1% hotel/resort, 7% industrial, 3% multifamily housing, 84% office/commercial, 3% retail, and 2% land. The geographic mix was 28.3% West, 20.7% Midwest, 42% East, and 9% South.

The Trinet Trust, a trust for a state retirement system, has acquired:

Sentinel

BEAVER RIDGE APARTMENTS
Beaverton, Oregon
$17,250,000

Sentinel Real Estate Corporation
1290 Avenue of the Americas
New York, NY 10104
(212) 408-2900



In real estate investment banking, real estate comes first for a reason.

Opportunities still exist in today's real estate market, but to invest wisely you need more than sound financial advice.

The Cushman & Wakefield Financial Services Group provides expert financial assistance and access to capital markets world wide. We also have precise, timely local market information and the real estate expertise to interpret it to your best advantage. This unparalleled combination separates Cushman & Wakefield from its investment banking competition.

Whether financing the acquisition of an industrial property portfolio or securing equity or debt in a major office building, we can show you how to invest profitably in real estate that works — today and in the future.

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A ROCKEFELLER GROUP COMPANY
Business America's Real Estate Firm

Financial Services Group
1166 Avenue of the Americas, New York, New York 10036 • (212) 841-7500

The firm offers an open-end fund and separate accounts. The Employee Benefit Real Estate Fund, a group trust, has contributions received and invested of $24 million, contributions received but not invested of $24 million, and contributions committed but not received of $32 million. The fund invests solely in developmental joint ventures.

Clients include IBEW, Electrical Workers Local No. 26, Ironworkers Local No. 5 and IBPAT.

The parent company is MNC Financial Inc.

Paul R. Lowman is in charge of property investments; Philip St. G. Cocke is client contact.

The Balcor Co.

4849 Golf Road, Skokie, Ill. 60077;
(312) 677-2900

Tax-exempt real estate assets	$1,792,000,000
Equity	$332,000,000
Hybrid debt	$1,435,000,000
Mortgages	$25,000,000
Commingled or pooled funds	
Equity	$332,000,000
Hybrid debt	$1,435,000,000
Direct, separate accounts	
Mortgages	$25,000,000
Total real estate assets	$4,411,000,000
Equity	$2,951,000,000
Hybrid debt	$1,435,000,000
Mortgages	$25,000,000

As of June 30, The Balcor Co. had $1.792 billion in U.S. institutional tax-exempt real estate assets.

The tax-exempt equity assets had a market value of $332 million as of June 30.

Of the total assets under management, $44 million was invested for non-U.S. clients.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 1.6% hotel/resort, 5.8% industrial, 32.2% multifamily housing, 39.5% office/commercial, 13.1% retail, and 7.8% mobile home parks. The geographic mix was 12.3% West, 29.8% Midwest, 23.4% East, and 34.5% South.

Tax-exempt clients include Michigan Municipal Employees and the City of Tampa.

Real estate subsidiaries are Balcor Institutional Realty Advisors and Balcor Development Co.

Thomas E. Meador is in charge of making property investments; John K. Powell Jr. is client contact.

Bennett & Kahnweiler Realty Advisors

9700 W. Bryn Mawr Ave., Rosemont,
Ill. 60018; (708) 671-7911

Tax-exempt real estate assets	$421,000,000
Equity	$359,000,000
Hybrid debt	$62,000,000
Direct, separate accounts	
Equity	$359,000,000
Hybrid debt	$62,000,000
Total real estate assets	$421,000,000

As of June 30, Bennett & Kahnweiler Realty Advisors had $421 million in U.S. institutional tax-exempt real estate assets, of which $317 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $271 million as of June 30. Contributions received but not invested were $20 million; contributions committed but not received were $68 million.

Of the U.S. tax-exempt assets, 89.3% were in existing and 10.7% in developmental properties. The property mix was 30% industrial; 5% multifamily housing, 33% office/commercial, 22% retail, 9% parking garages and 1% land. The geographic mix was 1% West, 95% Midwest, and 4% East.

The firm offers separate accounts.

Clients include Illinois Teachers and Ohio Teachers.

The parent is Bennett & Kahnweiler Inc.

James S. Smith and James S. Lee are in charge of making property investments; Ronald A. Gold is client contact.

The Boston Co. Real Estate Counsel Inc.

1 Boston Place, OB18B, Boston,
Mass. 02108; (617) 722-7116

Tax-exempt real estate assets	$2,723,000,000
Equity	$885,000,000
Hybrid debt	$1,838,000,000
Commingled or pooled funds	
Equity	$65,000,000
Hybrid debt	$106,000,000
Direct, separate accounts	
Equity	$820,000,000
Hybrid debt	$1,732,000,000
Total real estate assets	$2,723,000,000

As of June 30, The Boston Co. Real Estate Counsel Inc. had $2.723 billion in U.S. institutional tax-exempt real estate assets, of which $1.202 billion was fully discretionary.

The tax-exempt equity assets had a market value of $885 million as of June 30.

Of the total assets under management, $536 million was invested for non-U.S. clients.

Of the U.S. tax-exempt assets, 93% was in existing and 7% in developmental properties. The property mix was 10.3% industrial, 9.9% multifamily housing, 58.6% office/commercial, 18.2% retail, and 3% R&D. The geographic mix was 24.5% West, 14.2% Midwest, 51.4% East, and 9.9% South.

The firm offers closed-end commingled funds and separate accounts.

The parent company is The Boston Co.

Mark A. Albertson Sr. is in charge of making property investments; Thomas N. Trkla is the client contact.

Pensions & Investments will focus on employee benefit trends Dec. 10.

Alex. Brown Kleinwort Benson Realty Advisors

2 N. Charles St., Baltimore, Md.
21201; (301) 783-3200

Tax-exempt real estate assets	$3,722,000,000
Equity	$1,935,000,000
Hybrid debt	$1,573,000,000
Mortgages	$214,000,000
Commingled or pooled funds	
Equity	$125,000,000
Hybrid debt	$8,000,000
Direct, separate accounts	
Equity	$1,810,000,000
Hybrid debt	$1,565,000,000
Mortgages	$214,000,000
Total real estate assets	$3,745,000,000
Equity	$1,958,000,000
Hybrid debt	$1,573,000,000
Mortgages	$214,000,000

As of June 30, Alex. Brown Kleinwort Benson Realty Advisors Corp. had $3.722 billion in U.S. institutional tax-exempt real estate assets, of which $401 million was fully discretionary.

The tax-exempt equity assets had a market value of $1.824 billion as of June 30. Contributions received but not invested were $23 million; contributions committed but not received were $88 million.

Of the total assets under management, $33 million was invested in non-U.S. properties.

Top 10 equity real estate managers*

Firm	$ millions
Equitable Real Estate	11,190
JMB Institutional Realty	11,127
Copley Real Estate	9,070
Heitman Advisory	6,500
Prudential Real Estate	5,219
LaSalle Advisors	5,115
RREEF Funds	3,985
Yarmouth Group	3,880
Aetna Life	3,465
TCW Realty	3,269
Total	**62,820**

* Tax-exempt assets

Of the U.S. tax-exempt assets, 99% was in existing and 1% in developmental properties. The property mix was 9% hotel/resort; 18% industrial; 3% multifamily housing; 54% office/commercial; 15% retail; and 1% land. The geographic mix was 38% West; 14% Midwest; 23% East; and 25% South.

The firm offers closed-end funds and direct separate accounts.

Clients include California Public Employees, Oregon Public Employes', Texas Teachers, Illinois Teachers and Utah State.

John W. Guinee III is in charge of making property investments; Jack S. Griswold is client contact.

Cabot, Cabot & Forbes Realty Advisors Inc.

60 State St., Boston, Mass. 02109;
(617) 722-8200

Tax-exempt real estate assets	$900,000,000
Equity	$900,000,000
Direct, separate accounts	
Equity	$900,000,000
Total real estate assets	$900,000,000

As of June 30, Cabot, Cabot & Forbes Realty Advisors Inc. had $900 million in U.S. institutional tax-exempt real estate assets, all fully discretionary.

The tax-exempt equity assets had a market value of $365 million as of June 30. Contributions received but not invested were $40 million; contributions committed but not received were $495 million.

All of the U.S. tax-exempt assets were invested in existing properties. The property mix was 89% industrial and 11% office/commercial. The geographic mix was 27% West; 18% Midwest; 52% East; and 3% South.

The firm offers separate accounts.

Clients include Ameritech, BellSouth, IBM, Eastman Kodak and Shell Oil.

Robert E. Patterson is in charge of making property investments; Robert M. Angland is client contact.

CIGNA Investments Inc.

Hartford, Conn. 06152; (203)
726-4244

Tax-exempt real estate assets	$1,894,000,000
Equity	$1,731,000,000
Hybrid debt	$158,000,000
Mortgages	$5,000,000
Commingled or pooled funds	
Equity	$1,195,000,000
Hybrid debt	$45,000,000
Mortgages	$5,000,000
Direct, separate accounts	
Equity	$536,000,000
Hybrid debt	$113,000,000
Total real estate assets	$14,304,000,000
Equity	$2,708,000,000
Hybrid debt	$1,267,000,000
Mortgages	$10,329,000,000

As of June 30, CIGNA Investments Inc. had

CUSHMAN & WAKEFIELD.
A ROCKEFELLER GROUP COMPANY
is pleased to announce
it represented
The Tokyu Corporation
in the acquisition of
The Portman Hotel
a 330 room luxury hotel
San Francisco, California
from
Portman Companies
Cushman & Wakefield
555 California Street
San Francisco, CA 94104

CUSHMAN & WAKEFIELD.
A ROCKEFELLER GROUP COMPANY
is pleased to announce
it represented
Himark Enterprises
in the placement of
Permanent First Mortgage Financing for
a 106,000 square foot Industrial Property
Hauppauge, Long Island
with
Allstate Insurance Company
Cushman & Wakefield
EAB Plaza, West Tower, 15th Floor
Uniondale, NY 11556

CUSHMAN & WAKEFIELD.
A ROCKEFELLER GROUP COMPANY
is pleased to announce
it represented
Martin Selig Real Estate
in the placement of
5 Year Term Financing for
Elliott Bay Office Park
a 230,000 square foot office building
Seattle, Washington
with
Equitable Life Assurance Society
Cushman & Wakefield
999 Third Avenue
Seattle, WA 98104

CUSHMAN & WAKEFIELD.
A ROCKEFELLER GROUP COMPANY
is pleased to announce
it represented
Moore & Associates, Inc.
in the placement of
Participating Mortgage Financing for
Station Square
a 500,000 square foot office complex
Silver Spring, Maryland
with
Heller Financial and **Fuji Bank, Ltd.**
Cushman & Wakefield
Two Logan Square
Philadelphia, PA 19103

CUSHMAN & WAKEFIELD.
A ROCKEFELLER GROUP COMPANY
is pleased to announce
it represented
Chubb Realty, Inc.
in the placement of
Convertible Mortgage Financing for
Fountain Place
a 1.2 million square foot office building
Dallas, Texas
with
Australian Capital Equity, Pty. Limited
Cushman & Wakefield
5430 LBJ Freeway
Dallas, TX 75240

CUSHMAN & WAKEFIELD.
A ROCKEFELLER GROUP COMPANY
is pleased to announce
it represented
Prudential Insurance Company
in the sale of
McGregor Clinic
a 75,000 square foot
medical office building
Houston, Texas
to
8100 Greenbriar Dr. Ltd.
Cushman & Wakefield
1300 Post Oak Boulevard
Houston, TX 77056

CUSHMAN & WAKEFIELD.
A ROCKEFELLER GROUP COMPANY
is pleased to announce
it represented
The Marquardt Company
in the placement of
First Mortgage Financing
for a 752,353 square foot
manufacturing facility on
56.01 acres of land in
Van Nuys, California
with
Progress Credit Corporation
Cushman & Wakefield
515 South Flower Street
Los Angeles, CA 90017

CUSHMAN & WAKEFIELD.
A ROCKEFELLER GROUP COMPANY
is pleased to announce
it arranged a
development joint venture of
Janivo Group
Breda, Netherlands,
Nedamco
Princeton, New Jersey
and
Romanek Properties, Ltd.
for
633 St. Clair Place
a 625,000 square foot office tower
Chicago, Illinois
Cushman & Wakefield
150 South Wacker Drive
Chicago, IL 60606

CUSHMAN & WAKEFIELD.
A ROCKEFELLER GROUP COMPANY
is pleased to announce
it represented
Equitec Real Estate Investors XII
in the sale of a portfolio of 7 buildings
totalling 645,351 gross square feet
Southeast Michigan
to
Jan-jo Properties, Inc.
Cushman & Wakefield
27400 Northwestern Highway
Southfield, MI 48034

In real estate investment banking,
real estate comes first for a reason.

CUSHMAN & WAKEFIELD.
A ROCKEFELLER GROUP COMPANY
Business America's Real Estate Firm

Financial Services Group 1166 Avenue of the Americas, New York, New York 10036 • (212) 841-7500

$1.894 billion in U.S. institutional tax-exempt real estate assets, of which $1.245 billion was fully discretionary.

The tax-exempt equity assets had a market value of $1.626 billion as of June 30; contributions committed but not received were $105 million.

Of the U.S. tax-exempt assets, 98% was in existing and 2% in developmental properties. The property mix was 6% hotel/resort, 21% industrial, 7% multifamily housing, 16% office/commercial, 35% retail, and 15% other. The geographic mix was 20% West, 22% Midwest, 19% East, and 39% South.

The firm offers open- and closed-end funds, direct investments and separate accounts.

Separate Account R, an open-end equity account, has $783 million received and invested for 429 participants. SA-R consists of moderate size properties, typically suburban. Assets will be invested in existing and to-be-built commercial properties including office buildings, shopping centers, industrial properties, hotels and apartments. It will be diversified by location and property type. Structures include pure equity, construction loans convertible to equity and joint ventures. Leverage is capped at 30% of fund assets.

Tax-exempt clients include the General Board of Pensions of the United Methodist Church, Unisys, Grumman and Connecticut.

The parent is CIGNA Corp.

David R. Johnson is in charge of making property investments; David P. Marks is client contact.

Citicorp Real Estate Investment Management

599 Lexington Ave., New York, N.Y.
10043; (212) 559-9683

Tax-exempt real estate assets	$542,000,000
Equity	$404,000,000
Mortgages	$138,000,000
Commingled or pooled funds	
Equity	$135,000,000
Mortgages	$135,000,000
Direct, separate accounts	
Equity	$269,000,000
Mortgages	$3,000,000
Total real estate assets	$718,000,000
Equity	$580,000,000
Mortgages	$138,000

As of June 30, Citicorp Real Estate Investment Management had $542 million in U.S. institutional tax-exempt real estate assets, of which $341 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $370 million; contributions received but not invested were $34 million.

All assets are in existing properties. The property mix was 12% hotel/resort, 9.2% industrial, 54.7% office/commercial, 23.3% retail, and 0.8% land. The geographic mix was 29.8% West, 9.7% Midwest, 39.5% East, and 21% South.

The firm offers open-end funds and separate accounts.

The parent company is Citicorp.

Steve Brabant, Gary Gallagher and Tom McDaniel are in charge of making property investments; E. Andrew Lowe is the client contact.

Coldwell Banker Commercial Realty Advisors

533 Fremont Ave., Los Angeles, Calif.
90071; (213) 613-3705

Tax-exempt real estate assets	$1,004,000,000
Equity	$961,000,000
Hybrid debt	$37,000,000
Mortgages	$6,000,000
Commingled or pooled funds	
Equity	$489,000,000
Hybrid debt	$37,000,000
Mortgages	$6,000,000
Direct, separate accounts	
Equity	$472,000,000
Total real estate assets	$1,004,000,000

As of June 30, Coldwell Banker Commercial Realty Advisors had $1.004 billion in U.S. institutional tax-exempt real estate assets, of which $763 million was fully discretionary.

The tax-exempt equity assets had a market value of $894 million as of June 30; contributions committed but not received were $67 million.

Of the U.S. tax-exempt assets, 92.7% was in existing and 7.3% in developmental properties. The property mix was 34.8% industrial, 40.3% office/commercial, 24.6% retail, and 0.3% land. The geographic mix was 45.4% West, 13.5% Midwest, 31.8% East, and 9.3% South.

The firm offers closed-end funds, direct, separate accounts, and co-ventures.

Tax-exempt clients include AT&T, San Francisco City & County, Kodak and Unisys.

The parent is Coldwell Banker Commercial Group Inc. Subsidiaries are CB Commercial Real Estate Services, CB Real Estate Property Management Services and CB Appraisal and Consultation.

Cab Grayson is in charge of making property investments; Al Beaudette is client contact.

Copley Real Estate Advisors

399 Boylston St., Boston, Mass.
02116; (617) 578-1200

Tax-exempt real estate assets	$9,070,000,000
Equity	$9,070,000,000
Commingled or pooled funds	
Equity	$5,762,000,000
Direct, separate accounts	
Equity	$3,308,000,000
Total real estate assets	$16,019,000,000
Equity	$16,019,000,000

As of June 30, Copley Real Estate Advisors $9.07 billion in U.S. institutional tax-exempt real estate assets, of which $8.909 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $8.667 billion as of June 30. Contributions received but not invested were $64 million and contributions committed but not received, $339 million.

Of the U.S. tax-exempt assets, 56% was in existing and 44% in developmental properties. The property mix was 1% hotel/resort, 40% industrial, 3% multifamily housing, 26% office/commercial, 7% retail, and 23% land. The geographic mix was 64% West, 2% Midwest, 27% East, and 7% South.

The firm offers open- and closed-end funds and separate accounts.

The Developmental Properties Account, an open-end fund, has $1.165 billion in contributions received and invested from 170 clients. The Value Fund, a closed-end fund with an opportunistic value-added orientation, will invest approximately $1 billion to acquire major portfolios. The fund expects to close Dec. 31.

Copley emphasizes a developmental investment approach. Investments are in to-be-built properties, and are structured as partnerships with local developers in selected markets. The firm now is emphasizing industrial/warehouse and R&D facilities and single- and multifamily residential developments.

The parent company is The New England.

Kevin M. Mahony is in charge of making property investments; John C. Phillips Jr. is client contact.

Corporate Property Investors

305 E. 47th St., New York, N.Y.
10017; (212) 421-8200

Tax-exempt real estate assets	$2,868,000,000
Equity	$2,868,000,000
Commingled or pooled funds	
Equity	$2,868,000,000
Total real estate assets	$4,700,000,000
Equity	$4,700,000,000

As of June 30, Corporate Property Investors had $2.868 billion in U.S. institutional tax-exempt real estate assets, all in fully discretionary accounts.

The tax-exempt equity assets had a market value of $2.8 billion as of June 30. Contributions received but not invested were $32 million; contributions committed but not received were $36 million.

Of the total assets under management, $1.9 billion was invested for non-U.S. clients, including $24 million for pension funds.

Of the U.S. tax-exempt assets, 99% is in existing and 1% in developmental properties. The property mix is 2% industrial, 12% office/commercial, and 86% retail. The geographic mix was 17% West, 8% Midwest, 42% East, and 33% South.

The firm offers a real estate investment trust, in which 35 tax-exempt institutions participate. The REIT concentrates on regional shopping centers.

Tax-exempt clients include Exxon, AT&T, United Nations and Pennsylvania State Employes.

Hans C. Mautner is in charge of making property investments; William J. Lyons is client contact.

Dreyfus Realty Advisors

1180 Avenue of the Americas, 18th
Floor, New York, N.Y. 10036-8401;
(212) 764-3210

Tax-exempt real estate assets	$574,000,000
Equity	$538,000,000
Hybrid debt	$36,000,000
Direct, separate accounts	
Equity	$538,000,000
Hybrid debt	$36,000,000
Total real estate assets	$574,000,000

As of June 30, Dreyfus Realty Advisors Inc. had $574 million in U.S. institutional tax-exempt real estate assets, of which $200 million fully discretionary.

The tax-exempt equity assets had a market value of $513 million as of June 30; contributions received but not invested were $25 million.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 60% office/commercial and 40% retail. The geographic mix was 6% West, 9% Midwest, 62% East, and 23% South.

The firm offers separate accounts, closed-end funds and project advisory "work-out" expertise.

The Wal-Mart Community Shopping Center Co-Investment, with $25 million committed but not received, will acquire a portfolio of community shopping centers, anchored by Wal-Mart stores on a 100% equity basis. Leverage will be employed up to 50%.

The parent company is Dreyfus Corp.

Francis X. Tansey and David Luski are in charge of making property investments; Paul McEvoy Jr. is the client contact.

Eastdil Realty Inc.

40 W. 57th St., New York, N.Y. 10019;
(212) 315-7415

Tax-exempt real estate assets	$554,000,000
Equity	$405,000,000
Hybrid debt	$17,000,000
Mortgages	$132,000,000
Direct, separate accounts	
Equity	$405,000,000
Hybrid debt	$17,000,000
Mortgages	$132,000,000
Total real estate assets	$3,990,000,000
Equity	$1,628,000,000
Hybrid debt	$2,230,000,000
Mortgages	$132,000,000

As of June 30, Eastdil Realty Inc. had $554 million in U.S. institutional tax-exempt real estate assets, of which $380 million was in fully discretionary accounts.

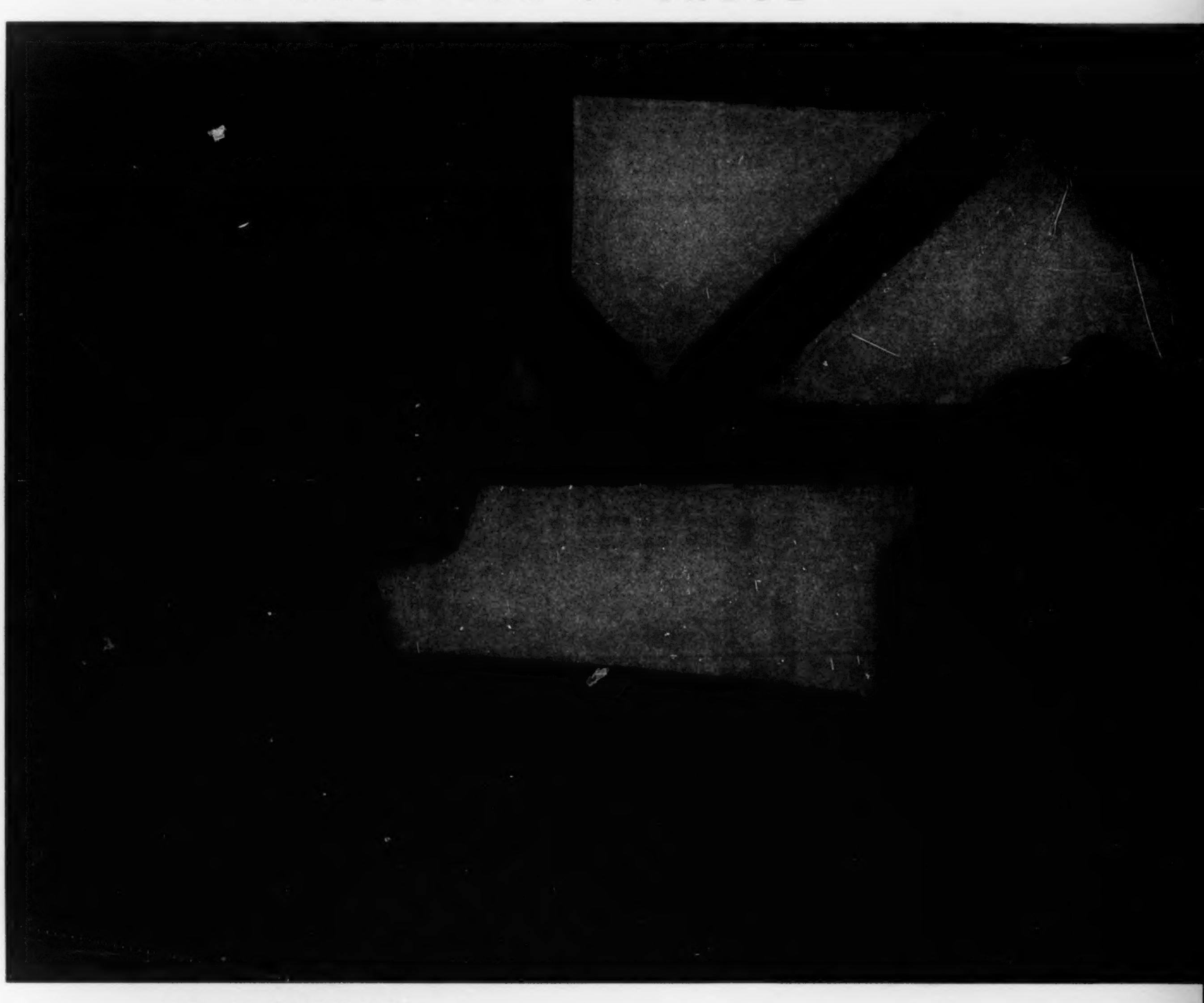
The tax-exempt equity assets had a market value of $405 million as of June 30.

Of the total assets under management, $2.723 billion was invested for non-U.S. clients.

All U.S. tax-exempt assets were in existing prop-

The third-quarter PIPER report will be published Nov. 26.

THE CREATION OF VALUE



The Creation of Value *by Douglas Fraser, Calgary. "The creation of value is the union of ideas and action," said the artist. "In my painting, an idea matures into a real-life application — it transcends the hypothetical and becomes tangible."*

erties. The property mix was 0.3% hotel resort, 11.8% industrial, 2.6% multifamily housing, 67.5% office commercial, 17.5% retail, and 0.3% land. The geographic mix was 37% in the West, 11% in the Midwest, 3.5% in the East, and 48.5% in the South.

The firm offers separate accounts.

Clients include TREET, Virginia Supplemental, New York State Employees and Missouri Employees.

Stephen Karpf, Jonathan Weller and Benjamin Lambert are in charge of making property investments.

Equitable Real Estate Investment Management

787 Seventh Ave., Area 46K, New
York, N.Y. 10019; (212) 554-4312

Tax-exempt real estate assets	$11,601,000,000
Equity	$11,190,000,000
Hybrid debt	$135,000,000
Mortgages	$276,000,000
Commingled or pooled funds	
Equity	$5,966,000,000
Hybrid debt	$135,000,000
Mortgages	$194,000,000
Direct, separate accounts	
Equity	$5,224,000,000
Mortgages	$82,000,000
Total real estate assets	$35,982,000,000
Equity	$23,768,000,000
Hybrid debt	$1,310,000,000
Mortgages	$10,904,000,000

As of June 30, Equitable Real Estate Investment Management Inc. had $11.601 billion in U.S. institutional tax-exempt real estate assets, all in fully discretionary accounts.

The tax-exempt equity assets had a market value of $11.022 billion as of June 30. Contributions received but not invested were $43 million; contributions committed but not received were $125 million.

Of the total assets under management, $2.497 billion was invested for non-U.S. clients.

Of the U.S. tax-exempt assets, 96.1% was in existing and 3.9% in developmental properties. The property mix was 7.2% hotel resort, 10.0% industrial, 50.6% office commercial, 25.5% retail, and 6.7% in land and apartments. The geographic mix was 20.9% West, 15.9% Midwest, 40.6% East, and 22.6% South.

The firm offers open- and closed-end funds, special focus funds, separate accounts and direct investments.

The Prime Property Fund, an open-end fund, has contributions received and invested of $3.769 billion and contributions received but not invested of $43 million for 271 participants. The fund invests in high-quality, income-producing real property purchased for the long term. Most properties are acquired on a free and clear basis.

PREFER, an open-end fund, has contributions received and invested of $27 million and contributions received but not invested of $2 million from seven participants. PREFER purchases shares of the Prime Property Fund.

Tax-exempt clients include the California Public Employees, California State Teachers, Exxon and Sun.

Its joint venture partner for non-U.S. real estate investments is the Europolis Invest consortium.

The parent company is Equitable Life Assurance Society of the U.S.

Thomas Clinton is in charge of making debt investments, Douglas Healy is in charge of making equity investments, Paul J. Dolnoy is client contact.

FS Realty Partners

1400 Three Lincoln Center, 5430 LBJ
Freeway, Dallas, Texas 75240;
(214) 386-9800

Tax-exempt real estate assets	$575,000,000
Equity	$477,000,000
Hybrid debt	$97,000,000
Mortgages	$1,000,000
Commingled or pooled funds	
Equity	$210,000,000
Hybrid debt	$9,000,000
Direct, separate accounts	
Equity	$267,000,000
Hybrid debt	$87,000,000
Mortgages	$1,000,000
Total real estate assets	$575,000,000

As of June 30, FS Realty Partners had $575 million in U.S. institutional tax-exempt real estate assets, none of which was fully discretionary.

The tax-exempt equity assets had a market value of $256 million as of June 30. Contributions received but not invested were $11 million; contributions committed but not received were $210 million.

Of the U.S. tax-exempt assets, 98% was in existing and 2% in developmental properties. The property mix was 5% industrial; 17% multifamily housing; 42% office commercial; 27% retail; and 9% land. The geographic mix was 20% West; 21% Midwest; 24% East; and 35% South.

The firm offers closed-end funds, direct investments and separate accounts.

Tax-exempt clients include U S WEST, Reader's Digest, Hughes Aircraft and Stanford University.

The parent company is Fayez Sarofim & Co.

Richard Sesler and Joshua Brown are in charge of making property investments; Mr. Brown is the client contact.

GE Investments

3003 Summer St., Stamford, Conn.
06905; (203) 326-2316

Tax-exempt real estate assets	$3,676,000,000
Equity	$2,998,000,000
Hybrid debt	$257,000,000
Mortgages	$421,000,000
Commingled or pooled funds	
Equity	$152,000,000
Direct, separate accounts	
Equity	$2,846,000,000
Hybrid debt	$257,000,000
Mortgages	$421,000,000
Total real estate assets	$3,676,000,000

Top 10 hybrid debt managers*

Firm	$ millions
Aldrich, Eastman & Waltch	2,765
Boston Co. Real Estate	1,838
Alex. Brown Kleinwort	1,573
J.P. Morgan Investment	1,519
Balcor	1,435
Wells Fargo Realty	1,237
Aetna Life	1,231
Invesco Realty Advisors	863
TCW Realty Advisors	635
Latimer & Buck	443
Total	**13,539**

* Tax-exempt assets

As of June 30, GE Investments had $3.676 billion in U.S. institutional tax-exempt real estate assets, all in fully discretionary accounts.

The equity assets had a market value of $2.8 billion; contributions committed but not yet received were $198 million.

Of the U.S. tax-exempt assets, $36 million was invested in the United Kingdom as of June 30.

Ninety-six percent of the assets were in existing and 4% in developmental properties. The property mix was 15% hotel resort; 9% industrial; 7% multifamily housing; 58% office/commercial; 8% retail; and 3% land. The geographic mix was 26% West; 7% Midwest; 54% East; and 13% South.

The firm offers closed-end funds and separate accounts.

Tax-exempt clients include Unisys, Eastman Kodak, Ford and Eli Lilly.

The parent is General Electric Co.

Joel R. Wilson is in charge of making property investments; Geoffrey R. Norman is client contact.

John Hancock Financial Services

P.O. Box 111, Boston, Mass. 02117;
(617) 572-4520

Tax-exempt real estate assets	$988,000,000
Equity	$979,000,000
Mortgages	$9,000,000
Commingled or pooled funds	
Equity	$275,000,000
Mortgages	$9,000,000
Direct, separate accounts	
Equity	$704,000,000
Total real estate assets	$15,504,000,000
Equity	$2,404,000,000
Mortgages	$13,100,000,000

As of June 30, John Hancock Financial Services had $988 million in U.S. institutional tax-exempt real estate assets, all of which was managed by two subsidiaries in fully discretionary accounts.

John Hancock Timber Resource Group managed $762 million in U.S. institutional tax-exempt assets. The market value of the equity assets was $701 million; contributions committed but not received totaled $56 million.

All of the U.S. tax-exempt institutional assets were invested in existing agricultural and timber lands.

The firm offers open- and closed-end funds, both pooled and non-pooled.

ForesTree Two, a closed-end fund currently accepting contributions, invests exclusively in timberland properties.

ACRE 2000, an open-end fund with $41 million received and invested for four participants, buys equity and mortgage stakes in agricultural properties.

Tax-exempt clients include Hallmark Cards, R.R. Donnelly, Detroit Police and Firemen and American Hoechst.

William Gordon and Paul Rennie are in charge of making property investments; Richard N. Smith and Richard Overton are client contacts and can be reached at (617) 572-0460.

John Hancock Properties Inc. managed $226 million in U.S. institutional tax-exempt real estate assets. The market value of the equity assets was $176 million; contributions received but not invested totaled $45 million.

Of the total assets managed for John Hancock Financial, $129 million was invested for non-U.S. clients.

All of the U.S. tax-exempt assets were invested in existing properties. The property mix is 13% industrial; 66% multifamily housing; 16% office/commercial; and 5% retail. The properties were located 47% in the West; 29% Midwest; 14% East; and 10% South.

The firm offers open- and closed-end commingled funds, separate accounts and co-investments.

The John Hancock Property Fund, an open-end fund, had $36 million received and invested and $28 million in contributions received but not invested. The fund isolates and quantifies risk on three levels: property, market and portfolio. The firm blends traditional know-how with contemporary quantitative method in an effort to deliver consistently the best risk-adjusted performance through market cycles.

Tax-exempt clients include Pennsylvania State Employes, Florida, Detroit and Connecticut.

Other subsidiaries of John Hancock Financial Services are JH Realty Services, JH Real Estate Finance, JH Realty Equities and JH Realty Management.

James Patterson II is responsible for making property investments; James McBride is client contact at (617) 572-3800.

In institutional real estate investing, value is created through the deliberate application of sound ideas.

At The Yarmouth Group, ideas emerge from portfolio strategies based on each client's needs. They are realized through rigorous investment objectives and active management of each asset.

At The Yarmouth Group, the union of ideas and action leads to the creation of value.

THE YARMOUTH GROUP
REAL ESTATE INVESTMENT ADVISORS

The Yarmouth Group Inc. • NEW YORK 212/555-6810 • CHICAGO 312/861-1105 • ATLANTA 404/251-0400 • LOS ANGELES 213/955-7979 • SAN FRANCISCO 415/392-1090 • LONDON 071 408-1525 • PARIS 42 96 60 42

Heitman Advisory Corp.

180 N. LaSalle St., Suite 3600,
Chicago, Ill. 60601; (312) 855-5700

Tax-exempt real estate assets	$6,500,000,000
Equity	$6,500,000,000
Commingled or pooled funds	
Equity	$1,300,000,000
Direct, separate accounts	
Equity	$5,200,000,000
Total real estate assets	$6,500,000,000

As of June 30, Heitman Advisory Corp. had $6.5 billion in U.S. institutional tax-exempt real estate assets, of which $4.68 billion was fully discretionary.

The tax-exempt equity assets had a market value of $5.55 billion as of June 30. Contributions received but not invested were $150 million; contributions committed but not received were $800 million.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 7.3% industrial; 44.2% office commercial; 35.1% retail; and 13.4% mixed-use properties. The geographic mix was 22% West; 48% Midwest; 24% East; and 6% South.

The firm offers closed-end commingled funds and separate accounts.

The Heitman Real Estate Fund V (HREF V) is a closed-end fund expected to close early in 1991. Five participants have committed a total of $50 million; no assets have been received. The Group Trust will acquire interests in a diversified portfolio of 10 to 15 regional shopping centers, industrial business parks, office buildings, mixed-use properties and luxury, high-rise residential properties. Properties, which generally will be larger sized and with values of more than $10 million, will be acquired on an equity, leveraged equity or joint venture basis.

Tax-exempt clients include AT&T, Pennsylvania State Employes, California Public Employees and Pacific Enterprises.

The parent company is Heitman Financial Ltd. Subsidiaries are Heitman Financial Services Ltd. and Heitman Properties Ltd.

Norman Perlmutter is in charge of making property investments. David Glickman is client contact.

Invesco Realty Advisors

2001 Bryan Tower, Suite 3300, Dallas,
Texas 75201; (214) 746-8297

Tax-exempt real estate assets	$1,028,000,000
Hybrid debt	$863,000,000
Mortgages	$165,000,000
Commingled or pooled funds	
Hybrid debt	$50,030,000
Direct, separate accounts	
Hybrid debt	$813,000,000
Mortgages	$165,000,000
Total real estate assets	$1,028,000,000

As of June 30, Invesco Realty Advisors had $1.028 billion in U.S. institutional tax-exempt real estate assets, of which $50 million was fully discretionary.

All of the U.S. institutional tax-exempt assets were invested in existing properties. The property mix was 17% industrial; 16% multifamily housing; 61% office commercial; and 6% retail. The geographic mix was 22% West; 12% Midwest; 13% East; and 53% South.

The firm offers closed-end funds, direct separate accounts and customized investment programs.

Tax-exempt clients include the Texas Teachers, Massachusetts, Stanford and Warner Lambert.

The parent company is Invesco MIM; another subsidiary is MIM Property Services Ltd.

James Trowbridge is in charge of making property investments; David A. Ridley is the client contact.

JMB Institutional Realty

900 N. Michigan Ave., Chicago, Ill.
60611-1585; (312) 915-1900

Tax-exempt real estate assets	$11,338,000,000
Equity	$11,127,000,000
Hybrid debt	$211,000,000
Commingled or pooled funds	
Equity	$10,224,000,000
Hybrid debt	$211,000,000
Direct, separate accounts	
Equity	$903,000,000
Total real estate assets	$11,869,000,000
Equity	$11,658,000,000
Hybrid debt	$211,000,000

As of June 30, JMB Institutional Realty Corp. had $11.338 billion in U.S. institutional tax-exempt real estate assets, of which $10.574 billion was fully discretionary.

The tax-exempt equity assets had a market value of $10.213 billion as of June 30. Contributions received but not invested were $81 million; contributions committed but not received were $833 million.

Of the U.S. tax-exempt assets, $5.348 billion was invested in Canada and the United Kingdom as of June 30.

Of the total assets under management, $490 million was invested for non-U.S. pension funds.

The firm's affiliate, JMB Realty Corp., holds an additional $14.6 billion for taxable investors, not included in the totals above.

Of the U.S. tax-exempt assets, 97% was in existing and 3% in developmental properties. The property mix was 1.9% industrial; 3.8% multifamily housing; 26.3% office commercial; 51.7% retail; and 16.3% mixed-use. The geographic mix was 25.4% West; 18.2% Midwest; 37.3% East; and 19.1% South.

The firm offers closed-end commingled funds, separate accounts and direct investments.

Tax-exempt clients include Pennsylvania State Employes, Ameritech, Kamehameha Schools/Bishop Estate and Connecticut.

Jerome J. Claeys III is in charge of making property investments; Thomas S. Foster is client contact.

Jones Lang Wootton Realty Advisors

101 E. 52nd St., New York, N.Y.
10022; (212) 688-8181

Tax-exempt real estate assets	$2,250,000,000
Equity	$2,208,000,000
Hybrid debt	$42,000,000
Direct, separate accounts	
Equity	$2,208,000,000
Hybrid debt	$42,000,000
Total real estate assets	$2,250,000,000

As of June 30, Jones Lang Wootton Realty Advisors had $2.25 billion in U.S. institutional tax-exempt real estate assets, of which $661 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $1.337 billion as of June 30. Contributions committed but not received were $871 million.

All assets were invested in existing properties. The property mix was 30.3% residential/hotel; 5.1% industrial; 25.9% office/commercial; 18.1% retail; and 20.6% in mixed use. The geographic mix was 9.6% West; 13.3% Midwest; 55.4% East; and 21.7% South.

The firm offers separate accounts and a closed-end commingled fund.

The JLWRA Europe Fund, a closed-end commingled fund, will invest in completed income-producing commercial properties in major European cities with established JLW Europe offices. Urban office and retail properties, suburban shopping centers and warehouse/distribution facilities will be targeted.

Tax-exempt clients include Pennsylvania School Employes, Wisconsin Investment Board, Illinois Teachers and U S WEST.

John Weisz, Charles Grossman, Frank Sullivan and Stephen Furnary are responsible for property investments; Stanislaw Maliszewski is client contact.

Karsten Realty Advisors

12121 Wilshire Blvd., Suite 900, Los
Angeles, Calif. 90025; (213)
826-0035

Tax-exempt real estate assets	$1,111,000,000
Equity	$816,000,000
Mortgages	$295,000,000,
Commingled or pooled funds	
Equity	$137,000,000
Direct, separate accounts	
Equity	$678,000,000
Mortgages	$295,000,000
Total real estate assets	$1,231,000,000
Equity	$936,000,000
Mortgages	$295,000,000

As of June 30, Karsten Realty Advisors had $1.111 billion in U.S. institutional tax-exempt real estate assets, all in fully discretionary accounts.

The tax-exempt equity assets had a market value of $741 million as of June 30; contributions committed but not received were $75 million.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 6% hotel/resort; 24% industrial; 7% multifamily housing; 42% office/commercial; 15% retail; and 6% land. The geographic mix was 67.5% West; 9% Midwest; 4% East; and 19.5% South.

The firm offers separate accounts and a series of closed-end commingled funds.

Tax-exempt clients include AT&T; New York State Common Retirement Fund; Eastman Kodak and Nevada Public Employees.

Robert A. Feren is in charge of making property investments; A. Redmond Doms Jr. and Carl A. Mayer Jr. are client contacts.

Kennedy Associates Real Estate Counsel Inc.

2400 Financial Center Building, 1215
Fourth Ave., Seattle, Wash. 98161;
(206) 623-4739

Tax-exempt real estate assets	$992,000,000
Equity	$727,000,000
Hybrid debt	$246,000,000
Mortgages	$19,000,000
Commingled or pooled funds	
Equity	$532,000,000
Hybrid debt	$137,000,000
Direct, separate accounts	
Equity	$195,000,000
Hybrid debt	$109,000,000
Mortgages	$19,000,000
Total real estate assets	$992,000,000

As of June 30, Kennedy Associates Real Estate Counsel Inc. had $992 million in U.S. institutional tax-exempt real estate assets, of which $198 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $523 million as of June 30. Contributions received but not invested totaled $204 million.

All assets were invested in existing properties. The property mix was 1% hotel/resort; 46% industrial; 51% office/commercial; 1% retail; and 1% mixed use. The geographic mix was 40% West; 35% Midwest; 20% East; and 5% South.

The firm offers separate accounts, co-investments, an open-end fund, fixed-income, equity and account management.

The Multi-Employer Property Trust, an open-end commingled real estate equity fund, had $679 million in contributions from 103 tax-exempt institutions. The fund uses a forward commitment strategy for a diversified portfolio of high-quality commercial properties.

Tax-exempt clients include Alaska Permanent

HOW METLIFE TURNED A GOOD INVESTMENT INTO A BEST SELLER.

In 1981, MetLife acquired the Midland Mall, a 500,000-square-foot shopping center in Warwick, Rhode Island for our Tower Fund, an open-ended equity real estate account. It was a good investment, a sound property in a steady market with excellent demographics.

But its layout was dated. Our market research showed that customers spent more time at a newer, larger mall right across the road.

So MetLife renovated, floor to ceiling, inside and out. Made the interiors brighter and more inviting. Added upscale, fashion-conscious tenants. Added thousands of square feet of new leasing space with kiosks and a food court. And we gave the mall a new name: The Rhode Island Mall. We repositioned it with an aggressive marketing campaign including local print and television.

Sales soared. And as our merchant tenants became more profitable, our investment became more valuable.

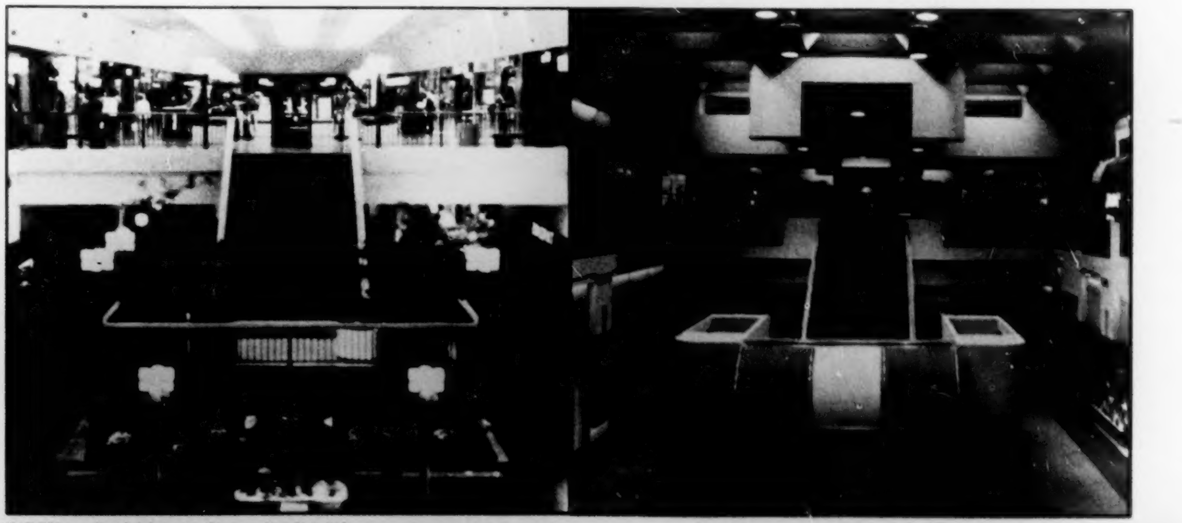
In 1989, MetLife sold the mall for the Tower Fund, achieving a 21% internal rate of return.

Our pension fund customers got a substantial financial gain, and the buyer got a handsomer, livelier and much more profitable mall.

The success is in the numbers.

For more information about Tower Fund, call Michael J. Walker, Assistant Vice-President, Pensions-Real Estate, Metropolitan Life Insurance Company, One Madison Avenue, New York, N.Y. 10010, (212) 578-3343.

GET MET. IT PAYS.
MetLife
Real Estate Investments
Pension Fund Management. Mortgage Financing
Acquisitions. Purchase-leasebacks. Development



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LARGEST REAL ESTATE MANAGERS

Fund, Painters and Allied Trades, Massachusetts Bay Transit Authority and Plumbers and Pipefitters.

The parent company is York Trust Group Ltd. PLC.

Jim Snyder is in charge of making property investments. Ronald Roberts is the client contact.

LaSalle Advisors Ltd.

11 S. LaSalle St., Chicago, Ill. 60603;
(312) 782-5800

Tax-exempt real estate assets	$5,115,000,000
Equity	$5,115,000,000
Commingled or pooled funds	
Equity	$2,650,000,000
Direct, separate accounts	
Equity	$2,465,000,000
Total real estate assets	$5,115,000,000

As of June 30, LaSalle Advisors Ltd. had $5.115 billion in U.S. institutional tax-exempt real estate assets, of which $2.98 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $4.125 billion as of June 30. Contributions committed but not received were $990 million.

Of the U.S. tax-exempt assets, 95% were in existing properties and 5% in developmental properties. The property mix was 6% industrial, 79% office commercial, and 15% retail. The geographic mix was 31% West, 26% Midwest, 26% East and 17% South.

The firm offers a series of closed-end funds investing in core properties, a series of specialty closed-end commingled funds and separate accounts.

Clients include Bell Atlantic, Illinois Municipal, Public Service Gas & Electric and Virginia Supplemental.

The parent is LaSalle Partners Ltd.

Kenneth M. Campia is in charge of making property investments. Christopher J. Burke is client contact.

Latimer & Buck

121 S. Broad St., Philadelphia, Pa.
19107; (215) 985-3900

Tax-exempt real estate assets	$1,391,000,000
Equity	$268,000,000
Hybrid debt	$443,000,000
Mortgages	$680,000,000
Direct, separate accounts	
Equity	$268,000,000
Hybrid debt	$443,000,000
Mortgages	$680,000,000
Total real estate assets	$1,391,000,000

As of June 30, Latimer & Buck had $1.391 billion in U.S. institutional tax-exempt real estate assets, of which $700 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $268 million as of June 30.

Of the assets managed, 80% was in existing and 20% in developmental properties. The property mix was 3% hotel resort, 7% industrial, 5% multifamily housing, 45% office commercial, 8% retail, and 32% residential. The geographic mix was 3% West, 13% Midwest, 74% East, and 10% South.

The firm offers direct investments and separate accounts.

Tax-exempt clients include Pennsylvania Public School Employes and Pennsylvania State Employes.

The parent company is First Fidelity Bancorporation.

Richard J. Humphreys is in charge of making property investments. M. Andrew Sheffler is client contact.

Lehndorff & Babson Real Estate Counsel

2501 Cedar Springs, Suite 550,
Dallas, Texas 75201; (214)
855-5630

Tax-exempt real estate assets	$1,830,000,000
Equity	$1,662,000,000
Hybrid debt	$168,000,000
Commingled or pooled funds	
Equity	$719,000,000
Hybrid debt	$139,000,000
Direct, separate accounts	
Equity	$943,000,000
Hybrid debt	$29,000,000
Total real estate assets	$3,673,000,000
Equity	$3,483,000,000
Hybrid debt	$190,000,000

As of June 30, Lehndorff & Babson Real Estate Counsel had $1.83 billion in U.S. institutional tax-exempt real estate assets, of which $858 million was fully discretionary.

The tax-exempt equity assets had a market value of $1.427 billion as of June 30. Contributions received but not invested were $40 million; contributions committed but not received were $195 million.

Of the total assets under management, $1.569 billion was invested for non-U.S. clients, including $98 million for pension funds.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 2.4% industrial, 56.2% office commercial, 39.6% retail, and 1.8% land. The geographic mix was 22.1% West, 13.5% Midwest, 51.5% East, and 12.9% South.

The firm offers open- and closed-end funds and separate account management.

The Lehndorff & Babson Property Fund IV is a closed-end group trust fund, which is expected to close Dec. 31. Fund IV had $65.25 million from 12 participants as of June 30. Of that, $39 million had been received and invested, $13.75 million received but not invested, and $12.5 million committed but not yet received.

The Council of Real Estate Group Trust (CORE) is an open-end group trust that has $462 million from four participants. Of the total, $275.7 million has been received and invested and $186.5 million has been committed but not yet received.

The investment style for both funds focuses on co-investment in scarce or unique properties that are completed and leased with an opportunity to create value through active asset and property management.

Top 10 mortgage managers*

Firm	$ millions
McMorgan	1,100
Latimer & Buck	680
Aldrich, Eastman & Waltch	560
Union Labor Life	453
GE Investments	421
L.J. Melody	408
Aetna Life	370
AFL-CIO Housing Trust	319
Karsten Realty	295
Equitable Real Estate	276
Total	**4,882**

* Tax-exempt assets

Tax-exempt clients include Nevada Public Employees, Ford, San Francisco City & County and Southern California Food & Commercial Workers.

The parent company is the Lehndorff Group.

M. Thomas Lardner is in charge of making property investments; G. Andrews Smith is client contact.

McMorgan & Co.

201 Spear St., Suite 1700, San
Francisco, Calif. 94105; (415)
777-9300

Tax-exempt real estate assets	$1,615,000,000
Equity	$260,000,000
Hybrid debt	$255,000,000
Mortgages	$1,100,000,000
Direct, separate accounts	
Equity	$260,000,000
Hybrid debt	$255,000,000
Mortgages	$1,100,000,000
Total real estate assets	$1,615,000,000

As of June 30, McMorgan & Co. had $1.615 billion in U.S. institutional tax-exempt real estate assets, all in fully discretionary accounts.

The tax-exempt equity assets had a market value of $260 million as of June 30.

All properties are located in the West.

The firm offers separate accounts.

Dan O'Donnell is in charge of making property investments; William Sumner is the client contact.

The master trust directory will be published Oct. 1.

Mellon/McMahan Real Estate Advisors Inc.

444 Market St., Suite 2100, San
Francisco, Calif. 94111; (415)
433-7770

Tax-exempt real estate assets	$995,000,000
Equity	$657,000,000
Hybrid debt	$338,000,000
Direct, separate accounts	
Equity	$657,000,000
Hybrid debt	$338,000,000
Total real estate assets	$1,060,000,000
Equity	$722,000,000
Hybrid debt	$338,000,000

As of June 30, Mellon McMahan Real Estate Advisors Inc. had $995 million in U.S. institutional tax-exempt real estate assets, all in fully discretionary accounts.

The tax-exempt equity assets had a market value of $522 million as of June 30. Contributions committed but not received were $135 million.

Of the total assets under management, $40 million was invested for non-U.S. pension funds.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 29% industrial; 3% multifamily housing; 36% office/commercial; 31% retail; and 1% land. The geographic mix was 51% West; 19% Midwest; 12% East; and 18% South.

The firm offers separate accounts and closed-end funds.

The Mellon McMahan Pacific 2000 fund is a $50 million to $200 million, closed-end group trust expected to close Dec. 31. The fund has received $5 million in contributions to date. The investment strategy will focus on geographic, property type and tenant diversification. Investments will be made in institutional-quality retail, industrial and suburban office buildings in growth corridors of major metropolitan areas of California, Oregon and Washington. Newer, substantially leased properties in the $5 million to $40 million range will be sought.

Tax-exempt clients include Westinghouse, NYNEX, Southwestern Bell and Contra Costa County.

The parent company is Mellon Bank.

James H. Ida is in charge of making property investments. Linda Spackman is client contact.

L.J. Melody & Co.

5847 San Felipe, Suite 4400, Houston,
Texas 77057 (713) 787-1900

Tax-exempt real estate assets	$922,000,000
Equity	$83,000,000
Hybrid debt	$431,000,000
Mortgages	$408,000,000
Direct, separate accounts	
Equity	$83,000,000

Hybrid debt	$431,000,000
Mortgages	$408,000,000
Total real estate assets	$2,521,000,000
Equity	$100,000,000
Hybrid debt	$890,000,000
Mortgages	$1,531,000,000

As of June 30, L.J. Melody & Co. had $922 million in total tax-exempt real estate assets. None was discretionary.

The tax-exempt equity assets had a market value of $17 million. Contributions committed but not received were $66 million.

All U.S. tax-exempt assets were in existing properties. The property mix was 5% multifamily housing; 45% office/commercial; 40% retail; and 10% mixed use. The geographic mix was 15% in the West; 5% in the Midwest; 5% in the East; and 75% in the South.

Robert D. Barkley is in charge of making property investments and is client contact.

Metric Institutional Realty Advisors

950 Tower Lane, Foster City, Calif.
94404; (415) 378-7000

Tax-exempt real estate assets	$616,000,000
Equity	$579,000,000
Hybrid debt	$21,000,000
Mortgages	$16,000,000
Commingled or pooled funds	
Equity	$218,000,000
Hybrid debt	$21,000,000
Mortgages	$16,000,000
Direct, separate accounts	
Equity	$361,000,000
Total real estate assets	$2,370,000,000
Equity	$2,333,000,000
Hybrid debt	$21,000,000
Mortgages	$16,000,000

As of June 30, Metric Institutional Realty Advisors had $616 million in U.S. institutional tax-exempt real estate assets, of which $304 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $211 million as of June 30. Contributions committed but not received were $368 million.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 14% industrial; 40% multifamily housing; 22% office/commercial; 24% retail. The geographic mix was 24% West; 17% Midwest; 5% East; and 54% South.

The firm offers close-end funds, co-investment programs and advisory accounts.

Metric Institutional Apartment Fund II, a closed-end fund with an anticipated closing date of June 30, 1991, has $10 million committed but not received from one institutional investor. MIAF II expects to invest in institutional-quality garden-style apartment properties up to 5 years old; up to 50% of the assets may be committed to projects under construction or to be built. Such properties will be safeguarded by funding on completion with seller guarantees or leasebacks or with earn-up or holdback provisions. Properties will be purchased 100% cash.

Tax-exempt clients include Alaska Permanent Fund, California Public Employees, San Francisco City & County Employees and Pennsylvania State Employes.

The parent company is Metric Realty/Metropolitan Life. A subsidiary is Metric Realty Services.

W. Patrick McDowell, is in charge of making property investments; Robert A. Fiddman is client contact.

Metropolitan Life Insurance

1 Madison Ave., New York, N.Y.
10010; (212) 578-3343

Tax-exempt real estate assets	$1,206,000,000
Equity	$1,148,000,000
Mortgages	$58,000,000
Commingled or pooled funds	
Equity	$807,000,000
Mortgages	$58,000,000
Direct, separate accounts	
Equity	$341,000,000
Total real estate assets	$24,809,000,000
Equity	$11,659,000,000
Mortgages	$13,150,000,000

As of June 30, Metropolitan Life Insurance Co. had $1.206 billion in U.S. institutional tax-exempt real estate assets, of which $1.18 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $975 million as of June 30. Contributions received but not invested were $123 million; contributions committed but not received were $50 million.

As of March 31, Metropolitan Life had $574 million invested for Japanese pension funds.

Of the U.S. tax-exempt assets, 98.4% was in existing properties and 1.6% in developmental properties. The property mix was 2% hotel/resort; 11% industrial; 16% multifamily housing; 37% office/commercial; 15% retail; 17% research and development; and 2% land. The geographic mix was 37% West; 17% Midwest; 20% East; and 26% South.

The firm offers open-end commingled funds and individual separate accounts.

The Tower Fund is an open-end fund with $288 million in contributions received and invested and $99 million in contributions received but not invested. Properties are wholly owned, completed and substantially leased, ranging in value from $10 million to $30 million at acquisition. Portfolios are limited to a maximum of 75 properties to facilitate active management.

The Defined Contribution Real Estate Fund (DCRE) is an open-end fund with $87 million in contributions received and invested and $9 million received but not invested. The fund primarily acquires well-leased, unleveraged properties ranging in value from $5 million to $15 million, with larger properties to be acquired as account assets increase. The fund acquires apartments, retail, industrial and R&D properties nationwide.

Tax-exempt clients include Eastman Kodak, Hawaii Employees, Oregon Public Employes and the United Mine Workers.

Non-U.S. partners for investments in U.S. real estate include 22 major Japanese financial institutions.

Subsidiaries include Century 21, Metric Institutional Realty Advisors, Metmor Financial Inc., Cross & Brown and Farmers National Co.

James Digney is in charge of making property investments; Michael J. Walker is the client contact.

MIG Cos.

1645 Palm Beach Lakes Blvd., Suite
600, West Palm Beach, Fla. 33401;
(407) 686-1800

Tax-exempt real estate assets	$1,237,000,000
Equity	$636,000,000
Hybrid debt	$406,000,000
Mortgages	$195,000,000
Commingled or pooled funds	
Equity	$490,000,000
Direct, separate accounts	
Equity	$146,000,000
Hybrid debt	$406,000,000
Mortgages	$195,000,000
Total real estate assets	$1,237,000,000

As of June 30, MIG Cos. had $1.237 billion in U.S. institutional tax-exempt real estate assets, of which $491 million was fully discretionary.

The tax-exempt equity assets had a market value of $621 million as of June 30. Contributions received but not invested were $15 million.

Of the U.S. tax-exempt assets, 89% was in existing and 11% in developmental properties. The property mix was 9% hotel/resort; 9% industrial; 29% multifamily housing; 27% office/commercial; 24% retail; and 2% other. The geographic mix was 26% West; 40% Midwest; 12% East; and 22% South.

The firm offers closed-end funds and direct, separate accounts.

Tax-exempt clients include Detroit Policemen & Firemen, Detroit General Retirement System, Allied-Signal and Philadelphia Board of Pensions & Retirement.

Subsidiaries of the firm include Graistone and MIG Realty Investors.

Larry Wright is in charge of making property investments and is the client contact.

J.P. Morgan Investment Management Inc.

522 Fifth Ave., New York, N.Y. 10036;
(212) 837-1260

Tax-exempt real estate assets	$2,125,000,000
Equity	$606,000,000
Hybrid debt	$1,519,000,000
Commingled or pooled funds	
Equity	$515,000,000
Hybrid debt	$1,390,000,000
Direct, separate accounts	
Equity	$91,000,000
Hybrid debt	$129,000,000
Total real estate assets	$2,256,000,000
Equity	$660,000,000
Hybrid debt	$1,596,000,000

As of June 30, J.P. Morgan Investment Management Inc. had $2.125 billion in U.S. institutional tax-exempt real estate assets, of which $2.015 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $281 million as of June 30. Contributions received but not invested were $277 million; contributions committed but not received were $48 million.

Of the total assets under management, $131 million was invested for non-U.S. clients.

Of the U.S. tax-exempt assets, 85% was in existing properties and 15% in developmental properties. The property mix was 2% hotel/resort; 22% industrial; 1% multifamily housing; 40% office/commercial; and 35% retail. The geographic mix was 5% West; 13% Midwest; 64% East; and 18% South.

The firm offers an open-end fund and direct separate accounts.

The Real Estate Fund had $1.416 billion in contributions received and invested; $477 million in contributions received but not invested; and $11 million in contributions committed but not received, on behalf of 162 institutions. The fund invests in urban and suburban offices, regional shopping centers and industrial/research and development buildings; investments typically range between $25 million and $50 million. In addition, about 3% of the fund's assets is invested in the shares of companies involved in the ownership and development of income-producing property.

The parent company is J.P. Morgan & Co.

Timothy J. Heise is in charge of making property investments; Erling Asheim is client contact.

NCNB National Bank

1 NCNB Plaza, T10-10, Charlotte,
N.C. 28255; (704) 374-5152

Tax-exempt real estate assets	$847,000,000
Equity	$781,000,000
Hybrid debt	$66,000,000
Commingled or pooled funds	
Equity	$537,000,000
Hybrid debt	$60,000,000
Direct, separate accounts	
Equity	$244,000,000
Hybrid debt	$6,000,000
Total real estate assets	$847,000,000

As of June 30, NCNB National Bank had $847 million in U.S. institutional tax-exempt real estate assets, of which $804 million was fully discretionary.

The tax-exempt equity assets had a market value of $781 million as of June 30.

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Of the U.S. tax-exempt assets, $25 million was invested in the United Kingdom as of June 30. Fifty-nine percent of the assets were in existing and 41% in developmental properties. The property mix was 2.5% multifamily housing, 57.5% office/commercial; and 40% land. All of the properties were in the South.

The firm offers an open-end fund, the NCNB Real Estate Fund, and separate accounts.

The parent company is NCNB Corp.

Floyd T. Boyce is in charge of making property investments. James K. Rhea III and K. Nick Kinney are the client contacts for Southeast and Southwest regions, respectively.

Public funds will be highlighted in the Oct. 29 issue.

The O'Connor Group

200 Park Ave., New York, N.Y. 10166;
(212) 687-7420

Tax-exempt real estate assets	$1,769,000,000
Equity	$1,644,000,000
Hybrid debt	$125,000,000
Commingled or pooled funds	
Equity	$761,000,000
Direct, separate accounts	
Equity	$883,000,000
Hybrid debt	$125,000,000
Total real estate assets	$2,112,000,000
Equity	$1,988,000,000
Hybrid debt	$124,000,000

As of June 30, The O'Connor Group had $1.769 billion in U.S. institutional tax-exempt real estate assets, of which $900 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $1.204 billion as of June 30. Contributions received but not invested were $90 million; contributions committed but not received were $350 million.

Of the U.S. tax-exempt assets, 98% was in existing and 2% in developmental properties. The property mix was 7% industrial; 53% office/commercial; and 40% retail. The geographic mix was 26% West; 33% Midwest; 10% East; and 31% South.

The firm offers closed-end funds and separate accounts.

The Retail Property Trust, a REIT, will concentrate on acquisitions of large retail properties.

Clients include AT&T, Bell Atlantic, California Teachers and New York State Common.

Nomura Real Estate USA is a non-U.S. partners for investments in U.S. real estate.

Glenn Rufrano, Benjamin Gifford and J.W. O'Connor are in charge of making property investments; Nancy I. Lashine is the client contact.

Phoenix Mutual Life Insurance Co.

1 American Row, Hartford, Conn.
06115; (203) 275-5302

Tax-exempt real estate assets	$502,000,000
Equity	$202,000,000
Hybrid debt	$300,000,000
Commingled or pooled funds	
Equity	$202,000,000
Hybrid debt	$225,000,000
Direct, separate accounts	
Hybrid debt	$75,000,000
Total real estate assets	$2,502,000,000
Equity	$852,000,000
Hybrid debt	$450,000,000
Mortgages	$1,200,000,000

As of June 30, Phoenix Mutual Life Insurance had $502 million in U.S. institutional tax-exempt real estate assets, all fully discretionary.

The tax-exempt equity assets had a market value of $160 million as of June 30 and contributions committed but not received of $42 million.

All of the U.S. tax-exempt assets were developmental properties. The property mix was 19% industrial; 41% multifamily housing; 27% office/commercial and 13% retail. The geographic mix was 32% West; 33% Midwest; 23% East; and 12% South.

The firm offers open-end and closed-end funds and separate accounts.

The open-end Real Estate Separate Account has 48 properties with more than $351 million in office, industrial, apartment and retail properties.

Clients include Connecticut, Virginia, Eastman Kodak and Pirelli Armstrong.

Waldemar Bazenas is in charge of making property investments; James S. Carter is client contact.

Piedmont Realty Advisors

650 California St., 22nd Floor, San
Francisco, Calif. 94108; (415)
433-4100

Tax-exempt real estate assets	$422,000,000
Equity	$162,000,000
Hybrid debt	$260,000,000
Direct, separate accounts	
Equity	$162,000,000
Hybrid debt	$260,000,000
Total real estate assets	$422,000,000

As of June 30, Piedmont Realty Advisors had $422 million in U.S. institutional tax-exempt real estate assets, all fully discretionary.

The tax-exempt equity assets had a market value of $162 million.

Of the U.S. tax-exempt assets, 95% was in existing and 5% in developmental properties. The property mix was 25% industrial; 9% multifamily housing; 51% office/commercial; 11% retail; and 4% land. The geographic mix was 46% West; 47% Midwest; and 7% South.

The firm offers separate accounts, co-investments and direct accounts.

Clients include Illinois Municipal, Chicago Transit Authority, Ameritech and San Diego County.

Robert H. Zerbst is in charge of making property investments; Don Jackson is the client contact.

Managers with non-U.S. clients

Firm	$ millions
Yarmouth Group	3,220
Eastdil Realty	2,723
Equitable Real Estate	2,497
CGR Advisors	1,960
Corporate Property Investors	1,900
Lehndorff & Babson	1,569
Schroder Real Estate	800
Baring Institutional Realty	736
Metropolitan Life	574
Boston Co. Real Estate	536
JMB Institutional Realty	490
RREEF Funds	457
Jacques & Kurdziel	450
Chesterton International	405
Aetna Life	340
PSI Institutional Realty	210
Citicorp Real Estate	176
AMB Institutional Realty	157
J.P. Morgan Investment	131
Dusco	114
Loeb Partners Realty	100
Balcor	44
Aldrich, Eastman & Waltch	25
Mellon/McMahan Real Estate	25
American Agricultural Investment	9
FFCA Institutional Advisors	4
Morguard Investments	2
Total	**19,654**

Property Capital Associates

1 Post Office Square, Boston, Mass.
02109; (617) 451-2400

Tax-exempt real estate assets	$854,000,000
Equity	$854,000,000
Commingled or pooled funds	
Equity	$751,000,000
Direct, separate accounts	
Equity	$103,000,000
Total real estate assets	$854,000,000

As of June 30, Property Capital Associates had $854 million in U.S. institutional tax-exempt real estate assets, all in fully discretionary accounts.

The tax-exempt equity assets had a market value of $735 million as of June 30. Contributions committed but not received were $119 million.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 6% hotel/resort; 6% industrial; 17% multifamily housing; 50% office/commercial; and 21% retail. The geographic mix was 26% West; 27% Midwest; 28% East; and 19% South.

The firm offers closed-end funds, co-investments, direct investments and separate accounts.

Tax-exempt clients include Maine State Retirement, Allied Signal, Eastman Kodak and Harvard.

Anthony D. Fox is in charge of making property investments; Gary R. Schwandt is client contact.

Prudential Real Estate Investors

3 Prudential Plaza, 751 Broad St.,
Newark, N.J. 07102-3777; (201)
802-8462

Tax-exempt real estate assets	$5,489,000,000
Equity	$5,219,000,000
Hybrid debt	$125,000,000
Mortgages	$145,000,000
Commingled or pooled funds	
Equity	$4,579,000,000
Hybrid debt	$75,000,000
Mortgages	$145,000,000

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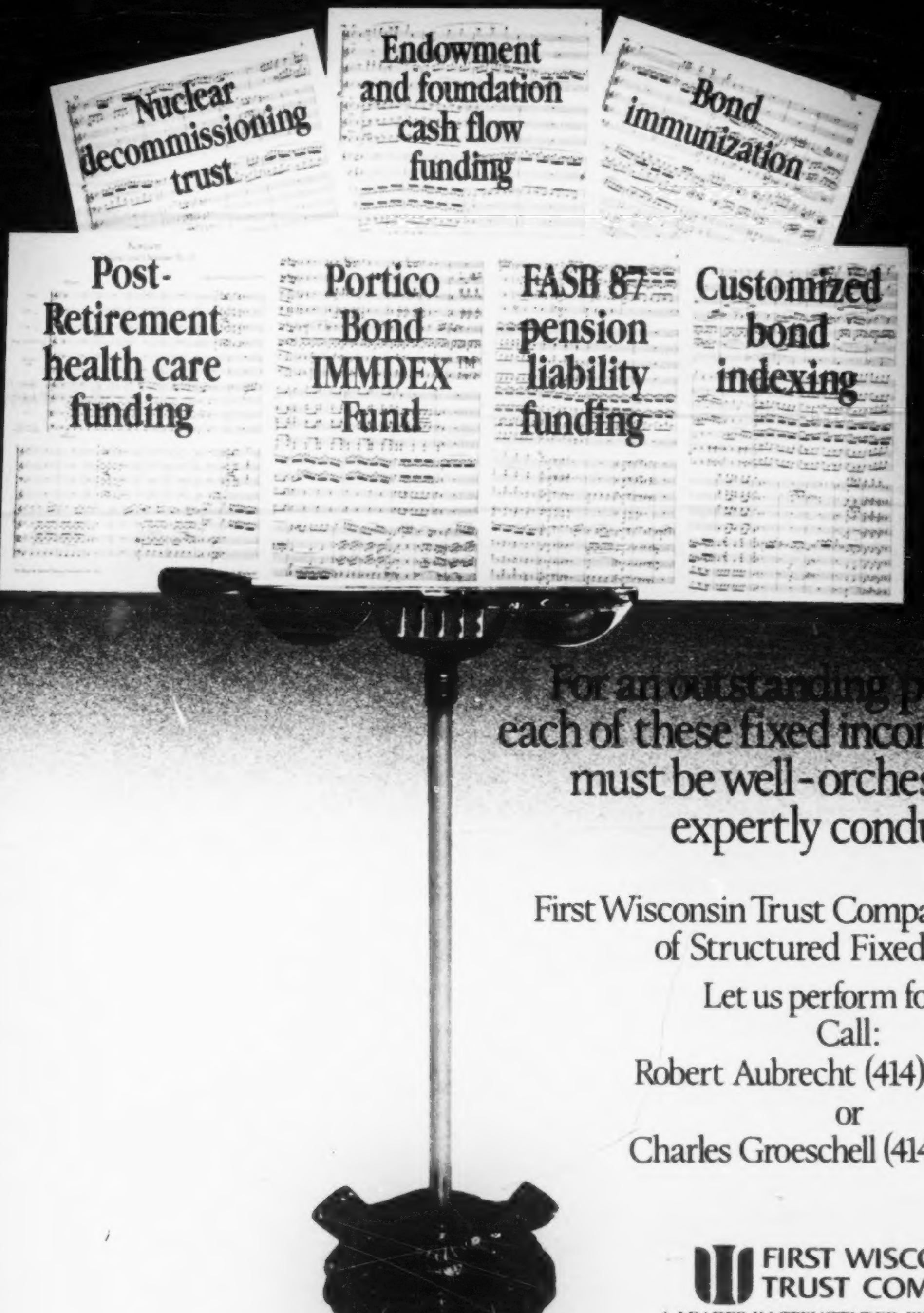
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Direct, separate accounts	
Equity	$640,000,000
Hybrid debt	$50,000,000
Total real estate assets	$39,035,000,000
Equity	$13,539,000,000
Hybrid debt	$218,000,000
Mortgages	$25,278,000,000

As of June 30, Prudential Real Estate Investors had $5.489 billion in U.S. institutional tax-exempt real estate assets, of which $5.397 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $4.551 billion as of June 30. Contributions received but not invested were $524 million; contributions committed but not received were $144 million.

Of the U.S. tax-exempt assets, 99.9% was in existing and 0.1% in developmental properties. The property mix was 9.3% hotel/resort; 16.7% industrial; 13.3% multifamily housing; 38.8% office/commercial; 21.4% retail; and 0.5% in land and agriculture. The geographic mix was 33.7% West; 16.6% Midwest; 36.2% East; and 13.5% South.

The firm offers open- and closed-end funds and separate accounts.

The Prudential Property Investment Separate Account is an open-end fund, with net assets of $3.436 billion and cash of $367 million for 194 clients. The fund is a broadly diversified core real estate portfolio that invests in completed, well-leased real estate equity.

The Strategic Performance Fund I is a closed-end fund with $23 million in net assets and $77 million in commitments not yet received from five clients. The anticipated closing date is May 1991. The fund will acquire existing and to-be-completed apartment, industrial and office properties in markets identified as having superior growth potential.

The Union Mortgage Account is an open-end account with net assets of $136 million and cash of $37 million for 27 clients. The fund invests primarily in fixed-rate mortgages and construction loans on properties using 100% union labor.

Clients include Colorado Employees, Chevron, Florida and the Western Conference of Teamsters.

The parent company is Prudential Insurance Co. of America.

Claude Zinngrade is in charge of making property investments; Les Lockwood is the client contact.

PSI Institutional Realty

1015 Grandview Ave., Glendale, Calif.
91201; (818) 244-8080

Tax-exempt real estate assets	$758,000,000
Equity	$758,000,000
Commingled or pooled funds	
Equity	$467,000,000
Direct, separate accounts	
Equity	$291,000,000
Total real estate assets	$3,233,000,000
Equity	$2,950,000,000
Mortgages	$283,000,000

As of June 30, PSI Institutional Realty had $758 million in U.S. institutional tax-exempt real estate assets, none of which was fully discretionary.

The tax-exempt equity assets had a market value of $634.4 million as of June 30. Contributions received but not invested were $31 million; contributions committed but not received were $93.1 million.

Of the U.S. tax-exempt assets, $8.7 million was invested in Canada.

Of the total assets under management, $209.9 million was invested for non-U.S. clients, including $47.6 million for pension funds.

All of the U.S. tax-exempt assets were in developmental properties and all were in self-storage facilities. The geographic mix was 44% West; 24% Midwest; 24% East; and 8% South.

The firm offers closed-funds and separate accounts.

Tax-exempt clients include Ameritech, Connecticut, Ford and Los Angeles County.

The parent company is Public Storage Inc. Subsidiaries of the firm or the parent company are Public Storage Management Inc., PSI Institutional Realty Advisors Inc. and Public Storage Institutional Realty Advisors Inc.

Hugh Horne is in charge of making property investments; Thomas J. Mizo is the client contact.

The RREEF Funds

650 California St., Suite 1800, San
Francisco, Calif. 94108; (415)
781-3300

Tax-exempt real estate assets	$4,045,000,000
Equity	$3,985,000,000
Hybrid debt	$60,000,000
Commingled or pooled funds	
Equity	$3,017,000,000
Direct, separate accounts	
Equity	$968,000,000
Hybrid debt	$60,000,000
Total real estate assets	$4,115,000,000
Equity	$4,055,000,000
Hybrid debt	$60,000,000

As of June 30, The RREEF Funds had $4.045 billion in U.S. institutional tax-exempt real estate assets, of which $3.367 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $3.287 billion as of June 30. Contributions received but not invested were $117 million; contributions committed but not received were $581 million.

Of the U.S. tax-exempt assets, $67 million was invested in Canada as of June 30.

Of the total assets, $457 million was invested for non-U.S. pension funds.

Of the U.S. tax-exempt assets, 97% was in existing and 3% in developmental properties. The property mix was 27% industrial; 2% multifamily housing; 36% office/commercial; and 35% retail. The geographic mix was 42% West; 23% Midwest; 19% East; and 16% South.

The firm offers closed-end core and specialized funds and separate accounts.

The RREEF Apartment Fund I has an anticipated closing of Nov. 30. Contributions received and invested total $58 million and contributions committed but not received total $31 million. There are 11 participants. The fund will total $125 million on completion; its object is to acquire a nationally diversified portfolio of quality apartment buildings in selected major metropolitan areas. All properties will be completed and substantially occupied at acquisition. The maximum amount of leverage will be 20%. RREEF expects to manage all properties.

Clients include AT&T, Illinois State Universities and Shell Oil.

James D. King and Patrick J. Callan are responsible for making property investments; Steven M. Steppe is client contact.

Schroder Real Estate Associates

437 Madison Ave., New York, N.Y.
10022; (212) 486-9800

Tax-exempt real estate assets	$500,000,000
Equity	$500,000,000
Commingled or pooled funds	
Equity	$400,000,000
Direct, separate accounts	
Equity	$100,000,000
Total real estate assets	$1,300,000,000
Equity	$1,300,000,000

As of June 30, Schroder Real Estate Associates had $500 million in U.S. institutional tax-exempt real estate assets, of which $300 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $400 million as of June 30. Contributions committed but not received were $100 million.

Of the total assets under management, $800 million was invested for non-U.S. clients, including $400 million for pension funds.

All of the U.S. tax-exempt assets are in existing properties. The property mix was 11% industrial, 27% office commercial, and 62% retail. The geographic mix was 34% West, 31% East, and 35% South.

The firm offers closed-end funds, co-investment and separate accounts.

The Schroder Real Estate Value-Enhancement Fund B is due to close in the fourth quarter of 1990. The fund has received commitments of $100 million from six clients. The fund is designed to deliver 8% to 12% inflation-adjusted real returns per annum by opportunistically acquiring underperforming retail, office and industrial properties with significant add-value potential. The fund also will subsidize intense property construction management including expansion, renovation, modernization and re-merchandising.

Clients include Eastman Kodak, Ameritech, Philip Morris and the New York State Common Fund.

Norman L. Peck is in charge of making property investments; John Emmanuel and Linda Wooldridge are the client contacts.

Sentinel Real Estate Corp.

1290 Avenue of the Americas, New
York, N.Y. 10104; (212) 408-2900

Tax-exempt real estate assets	$1,717,000,000
Equity	$1,717,000,000
Commingled or pooled funds	
Equity	$965,000,000
Direct, separate accounts	
Equity	$752,000,000
Total real estate assets	$2,039,000,000
Equity	$2,039,000,000

As of June 30, Sentinel Real Estate Corp. had $1.717 billion in U.S. institutional tax-exempt real estate assets, of which $1.417 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $1.358 billion as of June 30 and contributions committed but not received were $359 million.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 1% industrial; 88% multifamily housing; 4% office commercial; and 7% retail. The geographic mix was 38% West; 11% Midwest; 7% East; and 44% South.

The firm offers open- and closed-end funds and separate account management.

SRE Real Estate Fund is an open-end fund with $846 million received from 107 clients. The fund acquires garden apartment, office, retail and industrial properties in the $5 million to $25 million range with high current income and potential to enhance value through property management.

SRE Realty Partners II is a closed-end fund with $16 million from five investors. The fund will acquire new apartment properties in the $5 million to $20 million range with a potential for capital appreciation and value enhancement. The fund is expected to close in December 1990.

SRE Realty Partners III is a closed-end fund, with $10 million from three investors. The limited partnership acquires residential, commercial, industrial and other properties in the $3 million to $15 million range, which, because of location, offer the potential for significant capital appreciation through a change in density or use or in redevelopment.

Clients include Alaska, Ford, Michigan and Maryland.

John Streicker is in charge of making property investments and is the client contact.

Tax-exempt assets in non-U.S. property

Firm	$ millions
JMB Institutional Realty	5,348
RREEF Funds	67
GE Investments	36
NCNB National	25
PSI Institutional Realty	9
Angeles Institutional	6
Total	5,491

State Street Bank & Trust

225 Franklin St., Boston, Mass. 02110;
(617) 654-3953

Tax-exempt real estate assets	$500,000,000
Equity	$300,000,000
Hybrid debt	$200,000,000
Commingled or pooled funds	
Equity	$300,000,000
Hybrid debt	$200,000,000
Total real estate assets	$500,000,000

As of June 30, State Street Bank & Trust Co. had $500 million in U.S. institutional discretionary tax-exempt real estate assets. All were managed on its behalf by Aldrich, Eastman & Waltch in a series of commingled funds. See listing for Aldrich, Eastman & Waltch for a description of the investment strategy of the commingled fund series. To avoid double-counting, State Street's assets are not included in aggregate statistics published in this directory.

Clients include CBS, GTE, World Bank and Wisconsin Electric.

The parent company is State Street Boston Cor

Robert E. Kilroy is in charge of making prope investments; Peter E. Braun is the client contact.

TCW Realty Advisors

400 S. Hope St., Suite 600, Los
Angeles, Calif. 90071-2899; (213)
683-4200

Tax-exempt real estate assets	$3,904,000,00
Equity	$3,269,000,00
Hybrid debt	$635,000,00
Commingled or pooled funds	
Equity	$1,812,000,00
Hybrid debt	$419,000,00
Direct, separate accounts	
Equity	$1,457,000,00
Hybrid debt	$216,000,00
Total real estate assets	$3,904,000,00

As of June 30, TCW Realty Advisors had $3.90 billion in U.S. institutional tax-exempt real estat assets, of which $2.211 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market valu of $2.999 billion as of June 30. Contributions received but not invested were $5 million; contributions committed but not received were $265 million.

Of the U.S. tax-exempt assets, 98% was in existing and 2% in developmental properties. The property mix was 31% industrial; 40% office/commercia 24% retail; and 5% urban land. The geographic mi was 56% West; 12% Midwest; 24% East; and 8% South.

The firm offers direct, separate accounts an closed-end funds.

TCW Realty Fund VI is scheduled to close Sep 30. Contributions received and invested totaled $4 million; contributions received but not invested wer $5 million; and contributions committed not receive were $265 million from 32 clients. The fund is structured as a parallel closed-end self-liquidating limite partnership and group trust. The portfolio is diversified by geographic region and property type. Th fund acquires existing, income producing office, industrial distribution, research and development an shopping center properties in cities that possess th strongest economic foundations.

Clients include California Teachers, Pacific Telesis, McDonnell-Douglas and New York Stat Common Fund.

The firm is a joint venture with the Trust Compan of the West.

William K. Krauch is in charge of making propert investments; Bruce L. Ludwig is the client contact.

Trammell Crow Realty Advisers

3500 Trammel Crow Center, 2001
Ross Ave., Dallas, Texas
75201-2997; (214) 979-5100

Tax-exempt real estate assets	$1,750,000,00
Equity	$1,750,000,00
Commingled or pooled funds	
Equity	$1,300,000,00
Direct, separate accounts	
Equity	$450,000,00
Total real estate assets	$17,300,000,00
Equity	$17,300,000,00

As of June 30, Trammell Crow Realty Adviser had $1.75 billion in U.S. institutional tax-exempt rea estate assets, of which $1.35 billion was in full discretionary accounts.

The tax-exempt equity assets had a market valu of $1.05 billion as of June 30. Contributions committed but not received were $700 million.

All of the U.S. tax-exempt assets were in existing properties. The property mix was 3% hotel/resort; 3% industrial; 86% office/commercial; 6% retail; and 2% land. The geographic mix was 25% West; 4% Midwest; 46% East; and 25% South.

The firm has invested in S&L/thrift properties.

The firm offers close-end funds, co-investments and separate accounts.

Tax-exempt clients include Ameritech, du Pont, GM and the State of Michigan.

Subsidiaries are Trammell Crow Co., Trammell Crow Residential, Trammell Crow Interests and Trammell Crow Ventures.

Thomas J. O'Gara is in charge of making property investments; Carter Creech is client contact.

The Union Labor Life Insurance Co.

111 Massachusetts Ave. N.W.,
Washington, D.C. 20001; (202)
682-0900

Tax-exempt real estate assets	$453,000,00
Mortgages	$453,000,00
Commingled accounts	
Mortgages	$453,000,00
Total real estate assets	$453,000,00

As of June 30, The Union Labor Life Insuranc Co. had $453 million in U.S. institutional tax-exemp real estate assets, of which $34 million was in full discretionary accounts.

All of the U.S. tax-exempt assets were in developmental properties. The property mix was 10.6% hotel/resort; 31.8% industrial; 0.6% multifamily housing; 36.5% office/commercial; 20% retail; an 0.5% restaurants. The geographic mix was 32% West; 33.8% Midwest; 27.3% East; and 6.9% South.

Separate Account J ("J for Jobs") is an open-en fund with $453 million for 177 clients. The fund invests in a diversified mortgage portfolio and seek to provide a means of reversing unfavorable trend in unemployment by stimulating the construction industry and union construction jobs.

The parent company is ULLICO Inc.

Property investments are made by committee. John E. Stephan is the client contact.

Foreign exchange: Oct. 15.

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and
Harris Bank

are pleased to announce the formation of

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under the management of
Harris Trust and Savings Bank

Bank of Montreal Global Custody
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and holds in custody more than $12 billion in assets.

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William M. Taussig - Executive VP
Mary Jane Cullinan, CFA - Senior VP
Gary K. Belcher, CFA - Senior VP
Stephen T. Hibbard - Senior VP
Bruce E. Balding - Senior VP
Shari L. Meanor - VP
Patricia A. Bruno - Asst. VP
Karen E. Honeywell - Director Mktg.
Cynthia D. Wood - Senior Mktg. Manager
Nancy G. Wright - Operations Manager
Samantha Stephenson - Admin. Assistant

10 Liberty Square, Boston, Massachusetts 02109
617-426-3409

Farmland

Continued from page 23

with a target of $100 million.

Joyce Niggley, vice president with Equitable Agri-Business Inc., Atlanta, said an unidentified corporate pension fund committed $20 million to The Equitable Agricultural Property Fund, a closed-end vehicle with a goal of $100 million.

John Hancock Financial Services, Boston, recently introduced ACRE 2000, its investment program for farmland. Although ACRE 2000's investment structure is flexible, the firm is suggesting a separate account arrangement, said Julie Koeninger, assistant agriculture investment officer.

The argument for investing in farmland is growing. Barton M. Biggs, chairman of Morgan Stanley Asset Management, New York, is telling investors, "Buy a farm and get rich slowly."

"We estimate investors will achieve net income returns of 6% to 8% on farm properties this year," Mr. Biggs wrote in a Morgan Stanley report.

For the five years ended March 31, Owens-Illinois' return on its farmland investment was a compound annualized −6.9%, Mr. Boller said. "As you come more current, it goes to 1.8% for three years, which is a heck of a lot better," he said. The return on investment for the 18 months ended the first quarter was 3.1%, and for the 12 months, 1.9%.

According to Ibbotson Associates, Chicago, from 1960 to 1988, farm real estate generated a compound annual rate of return of 9.67%, compared with 8.81% for commercial real estate, 9.62% for the Standard & Poor's 500 Stock Index and 6.57% for the Shearson Lehman Hutton Government/Corporate Bond Index. ■

— *Finance editor Marcia Parker contributed to this story.*

Wells Fargo Realty Advisors

595 Market St., 15th Floor, San
Francisco, Calif. 94105-2824; (415)
396-6222

Tax-exempt real estate assets	$1,316,000,000
Equity	$78,000,000
Hybrid debt	$1,237,000,000
Mortgages	$1,000,000
Commingled or pooled funds	
Equity	$78,000,000
Hybrid debt	$140,000,000
Mortgages	$1,000,000
Direct, separate accounts	
Hybrid debt	$1,097,000,000
Total real estate assets	$1,401,000,000
Equity	$291,000,000
Hybrid debt	$1,109,000,000
Mortgages	$1,000,000

As of June 30, Wells Fargo Realty Advisors had $1.316 billion in U.S. institutional tax-exempt real estate assets, of which $901 million was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $68 million as of June 30. Contributions received but not invested were $10 million.

Of the U.S. tax-exempt assets, 15% was in existing and 85% in developmental properties. The property mix was 21% industrial; 5% multifamily housing; 21% office/commercial; 44% retail; and 9% land. The geographic mix was 73% West; 7% Midwest; 16% East; and 4% South.

The firm offers open-end commingled funds and separate accounts.

Wells Fargo Real Estate Equity Fund is an open-end fund with $185 million in contributions received and invested and $10 million in contributions received but not invested from 150 participants. The strategy emphasizes development-oriented transactions and opportunities where existing real estate can be upgraded, expanded or renovated. Transactions are typically structured as either developmental joint ventures or developmental participating mortgages.

Tax-exempt clients include Ohio Employees, GM, IBM and Frank Russell Trust.

The parent company is Wells Fargo & Co.

Doug Hayek is in charge of making property investments; J. Michael Johnson is the client contact.

The Yarmouth Group Inc.

Swiss Bank Tower, 10 E. 50th St.,
New York, N.Y. 10022; (212)
355-4810

Tax-exempt real estate assets	$4,290,000,000
Equity	$3,880,000,000
Hybrid debt	$410,000,000
Commingled or pooled funds	
Equity	$220,000,000
Direct, separate accounts	
Equity	$3,660,000,000
Hybrid debt	$410,000,000
Total real estate assets	$7,510,000,000
Equity	$7,100,000,000
Hybrid debt	$410,000,000

As of June 30, The Yarmouth Group Inc. had $4.29 billion in U.S. institutional tax-exempt real estate assets, of which $2.16 billion was in fully discretionary accounts.

The tax-exempt equity assets had a market value of $2.34 billion as of June 30. Contributions committed but not received were $1.54 billion.

Of the total assets under management, $3.22 billion was invested for non-U.S. clients, including $770 million for pension funds.

Of the U.S. tax-exempt assets, 97% was in existing and 3% in developmental properties. The property mix was 4% hotel/resort; 1% industrial; 67% office/commercial; and 28% retail. The geographic mix was 39% West; 11% Midwest; 42% East; and 8% South.

The firm offers separate accounts and close-end funds.

Tax-exempt clients include New York Common Retirement Fund, RJR Nabisco, Kentucky and Southern California Edison.

Evan H. Heller is in charge of making property investments; David R. Hodes is the client contact.

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- OHIO STATE TEACHERS RETIREMENT SYSTEM
- SCHRODER REAL ESTATE ASSOCIATES
- EQUITABLE REAL ESTATE INVESTMENT MANAGEMENT
- BARING INSTITUTIONAL REALTY ADVISORS
- THE NATIONAL BANK OF WASHINGTON
- CALIFORNIA PUBLIC EMPLOYEES RETIREMENT SYSTEM
- HSG/ASSET MANAGEMENT GROUP

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Contact: Guy Copperthite
Vice President, Director of Marketing
(301)656-4212

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in Thousand Oaks, California

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in Union City, California

REFLECTIONS
a 326 unit garden apartment
in Las Vegas, Nevada

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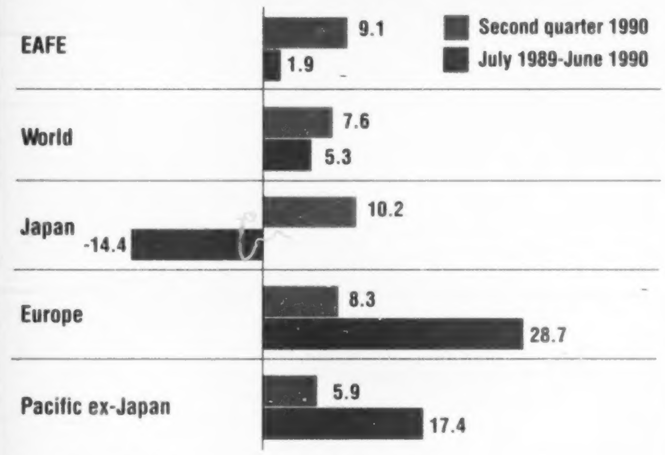
George M. Jenkins, Jr.

Director of Marketing
CF Management Corp.
10960 Wilshire Boulevard,
Suite 2000
Los Angeles, California 90024
213 444-3967

The bottom line is exceptional real estate.

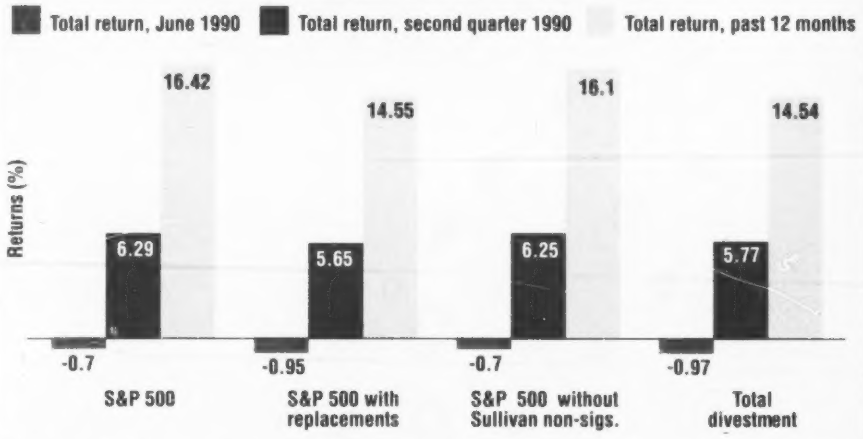
Morgan Stanley Capital International worldwide indexes



Source: Morgan Stanley Capital International, New York
Indexes are in U.S. dollar terms without dividends reinvested

Graphic by Holly Seguine

The South Africa Free Index



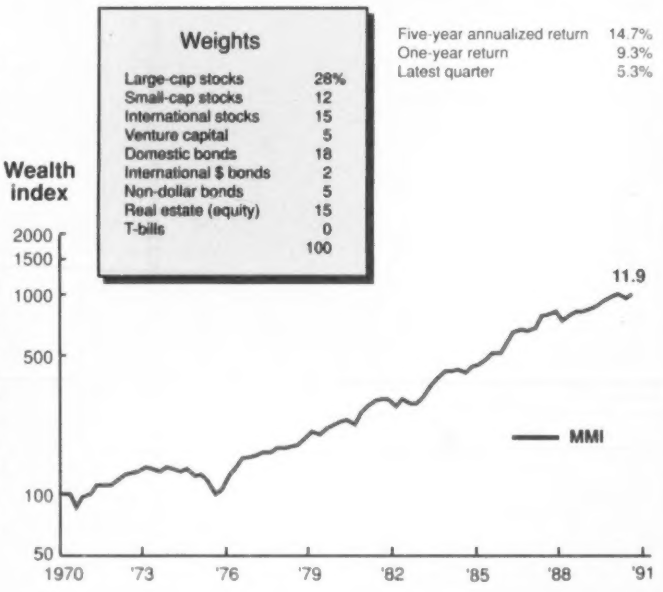
S&P 500 with replacements: Replaces a South Africa-related company with next largest company in the industry. **S&P 500 without Sullivan non-signatories:** Excludes 6 companies, no replacements. **Total divestment:** Eliminates all companies with South African involvement, no replacements.

Source: Wilshire Associates, Santa Monica, Calif.

Graphic by Holly Seguine

Multiple Markets Index

The Multiple Markets Index is a benchmark for total portfolio returns. It is composed of eight asset classes used by retirement plan executives; it is calibrated to reflect the same degree of risk of the typical pension portfolio; it uses passive fixed policy weights; and it represents the individual asset classes by the broadest and most complete market return data available.



Weights

Large-cap stocks	28%
Small-cap stocks	12
International stocks	15
Venture capital	5
Domestic bonds	18
International $ bonds	2
Non-dollar bonds	5
Real estate (equity)	15
T-bills	0
	100

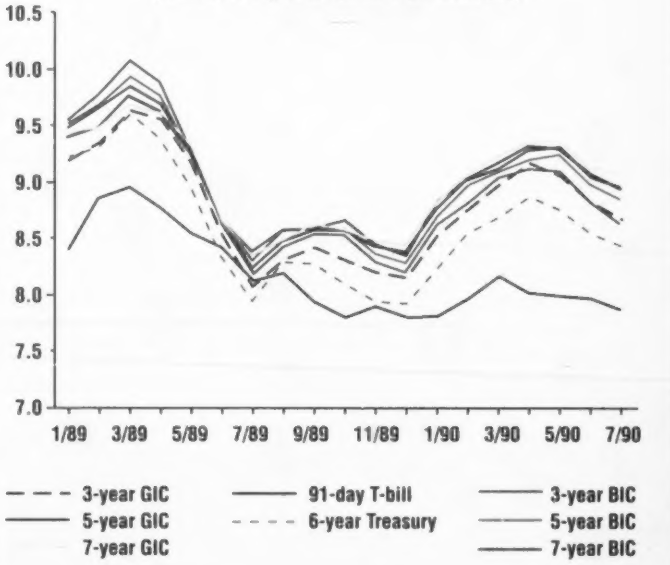
Five-year annualized return	14.7%
One-year return	9.3%
Latest quarter	5.3%

12/31/69 = 100
Data through 3/31/90
Graphic by John Smither

Source: Brinson Partners Inc., Chicago

Summary of average GIC & BIC data vs. market yields

(Bullet, compound $1 million contract)



Source: William M. Mercer Asset Planning Inc.

Graphic by Holly Seguine

Second quarter 1990 returns

	Russell 3000®	Russell 1000®	Russell 1000® by market capitalization				Russell 2000®
			Large	Medium/large	Medium	Medium/small	
Technology	8.20%	8.27%	8.78%	9.53%	3.53%	7.28%	7.39%
Health care	19.05	19.28	20.88	12.87	15.67	23.03	16.88
Consumer discretionary	8.65	9.24	15.91	6.65	9.72	5.58	3.67
Consumer staples	14.96	15.22	19.71	10.52	9.26	13.02	6.43
Integrated oils	1.43	1.40	2.33	−6.25	−0.71	−1.27	10.27
Other energy	0.03	0.29	0.00	−0.36	1.38	−1.15	−1.96
Materials and processing	0.68	0.85	−5.18	2.09	1.50	4.32	−0.58
Producer durables	7.60	7.92	22.19	4.21	−2.42	1.94	4.42
Auto and transportation	−0.10	−0.36	0.48	2.03	−4.15	−0.86	3.38
Financial services	3.33	3.69	8.64	5.2	3.16	−1.24	−1.87
Utilities	−0.79	−0.74	−0.96	−0.67	0.19	−1.75	−2.54
Total	5.80	5.94	8.78	4.74	3.65	2.81	3.86

Source: Frank Russell Co., Tacoma, Wash.

GIC rates gain little during quarter

By Fred Williams

Rates on medium-term guaranteed investment contracts trended upward for most of the second quarter, but turned down near the end to finish near where they began.

Peter Bowles, chief investment officer at Fiduciary Capital Management Inc., a Woodbury, Conn., GIC management firm, said only 10-year rates ended slightly higher for the quarter.

Spreads between the average three-year and 10-year rates began the quarter at 0.16% and finished at 0.29%, he said.

According to Mr. Bowles, quality spreads over comparable treasury instruments declined as interest rates increased and widened again in the second half of the quarter as rates softened.

"Quality spreads ranged from 0.77% to 1.09% at the end of the first quarter, declined to a range of 0.68% to 0.95% in the first week of May and then finished the quarter ranging from 0.75% to 1.14%," he said.

John Knight, president of Lamberson Knight GIC Inc., Short Hills, N.J., said capacity "is still not a problem" for insurance carriers and that GIC rates moved during the quarter in tandem with the fixed-income market.

The following insurance company rate quotations on representative five-year, single deposit, simple interest, $1 million GICs were provided by Lamberson Knight and GIC Inc., Beaverton, Ore.

- Allstate Life Insurance Cos., Northbrook, Ill.: June 29, 8.99%; March 30, 9.1%.
- Bankers Life Assurance Co., Des Moines, Iowa: 8.67%; no quote.
- Canada Life Assurance Co., Toronto: 8.91%; 9.12%.
- CNA Insurance Co., Chicago: June 12, 8.6%; 9.04%.
- Confederation Life Insurance Co., Atlanta: 9.16%; 9.35%.
- Connecticut Mutual Life Insurance Co., Hartford: June 12, 8.92%; 9%.
- Continental Assurance Co., Chicago: 8.89%; no quote.
- Crown Life Insurance Co., Toronto: 9.03%; 9.02%.
- Hartford Life Insurance Co., Hartford, Conn.: 8.95%; no quote.
- John Hancock Mutual Life Insurance Co., Boston: 8.87%; 9.04%.
- Life Insurance Co. of Georgia, Atlanta: June 12, 8.95%; 9.05%.
- Life Insurance Co. of Virginia, Richmond: 8.91%; 9.1%.
- Lincoln National Pension Insurance Co., Fort Wayne, Ind.: 8.92%; 9.26%.
- Massachusetts Mutual Life Insurance Co., Springfield: 8.82%; no quote.
- Mutual Life Insurance Co. of New York, New York: 9.02%; 9.08%.
- New England Mutual Life I
surance Co., Boston: 8.64%; n
quote.
- New York Life Insurance C
New York: 9%; 9.1%.
- Northwestern National Life I
surance Co., Minneapolis: 8.94%; n
quote.
- Ohio National Life Insuran
Co., Cincinnati: 9.1%; 9.33%.
- Pacific Mutual Life Insuran
Co., Newport Beach, Calif.: 8.26
no quote.
- SAFECO Corp., Seattle: Ju
12, 9.22%; 9.3%.

William M. Mercer Asset Pla
ning Inc., Deerfield, Ill., surve
insurance companies for rate qu
tations and provided the follo
ing summary of various bul
GICs for June 1990:

- Three-year, $1 million, co
pound: high, 9.27%; low 8.17
average, 8.08%.
- Three-year, $1 million, si
ple: high, 9.27%; low, 8.18%; ave
age, 8.78%.
- Five-year, $1 million, co
pound: high, 9.49%; low, 8.37
average, 9.05%.
- Five-year, $1 million, simpl
high, 9.49%; low, 8.35%; avera
9.02%.
- Seven-year, $1 million, co
pound: high, 9.53%; low, 8.5
average, 9.14%.
- Seven-year, $1 million, si
ple: high, 9.41%; low, 8.49%; ave
age, 9.11%.
- Three-year, $5 million, co
pound: high, 9.32%; low, 8.5
average, 8.88%.
- Three-year, $5 million, si
ple: high, 9.32%; low, 8.34%; ave
age, 8.84%.
- Five-year, $5 million, co
pound: high, 9.59%; low, 8.66
average, 9.11%.
- Five-year, $5 million, simpl
high, 9.59%; low, 8.63%; avera
9.07%.
- Seven-year, $5 million, co
pound: high, 9.59%; low, 8.75
average, 9.2%.
- Seven-year, $5 million, si
ple: high, 9.59%; low, 8.75%; ave
age, 9.16%.

Schmidt Management Co.,
GIC market research firm
Tulsa, Okla., has developed
guaranteed product performan
measurement index. The Schmi
GIC composite index approx
mates the return of a continuo
equally weighted, investment
one- to 10-year original-maturi
GICs. (The index shows return
not rates.) Total returns for t
quarter and 12 months end
June 30 were 2.32% and 9.8%, r
spectively. In comparison, t
Standard & Poor's 500 Sto
Index returned 6.14% and 16.29
the Merrill Lynch Governmen
Corporate Bond Index return
3.39% and 6.89%; and 91-D
Treasury bills, 1.93% and 7.96%.

Mercer also surveys banks f
rate quotations on their guara
teed instruments. Rate quotes f
one- and three-year bullet BI
for June were:

- One-year, $1 million, co
pound: high. 8.85%; low, 8.1%; ave
age, 8.3%.
- One-year, $1 million, simpl
high, 8.85%; low, 8.13%; avera
8.36%.
- Three-year, $1 million, co
pound: high, 9.37%; low, 8.57%; a
erage, 8.81%.
- Three-year, $1 million, simpl
high, 9.37%; low, 8.73%; avera
8.92%.
- One-year, $5 million, co
pound: high, 8.95%; low, 8.15%; a
erage, 8.35%.
- One-year, $5 million, simpl
high, 8.95%; low, 8.23%; avera
8.41%.
- Three-year, $5 million, co
pound: high, 9.4%; low, 8.6%; a
erage, 8.85%.
- Three-year, $5 million, simpl
high, 9.98%; low, 8.73%; avera
9%.

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with capital commitments totalling

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September 17, 1990

Pensions&Investments

The Newspaper of Corporate and Institutional Investing

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AT DEADLINE

IRS might stop 401(k) test

New guidance from the Internal Revenue Service last week might stop employers from using a new non-discrimination test for 401(k) plans.

In a revision to earlier proposals, the IRS said it was considering banning a testing practice, known as restructuring, at the end of the year.

Appointment spurs dispute

Some state employees are objecting to appointment of Charles Travis as the new executive director of the Employees' Retirement System of Texas.

The employees contend more qualified candidates were passed over in the search to replace Clayton Garrison, who retired.

The employees also said the Texas Parks and Wildlife Department had been the focus of media inquiries for its stocking of game animals on private property owned by state public officials while Mr. Travis was executive director.

Vote on Betts bill expected

The Senate this week is expected to vote on anti-age discrimination legislation.

New rules in a substitute amendment to the so-called Betts bill, however, still do not address employer concerns on whether the legislation could interfere with early retirement incentive plans.

Company picks treasurer

John E. Droubay has been named vice president and treasurer at El Paso Electric Co. Mr. Droubay is replacing Gary Hedrick, who was appointed to the position of vice president of financial planning and rate administration.

Mr. Droubay is the former treasurer of Utah Power and Light.

Fund hires Dominion Trust

Valley Proteins Inc. has hired Dominion Trust Co. to manage its approximately $4 million in pension fund assets as a balanced account with an orientation toward equities.

Dominion Trust replaces Farmers and Merchants Bank.

Aetna new adviser to Daiwa

Aetna Financial Services has been hired as investment adviser to four retail yen-based, U.S. mortgage-backed securities funds offered by Daiwa Investment Trust, Tokyo.

Hoare Govett split planned

The Hoare Govett Cos. will be split into two corporate groups under a proposed buy-out agreed upon in principal by the management of Security Pacific Corp. and Security Pacific Hoare Govett Group Ltd.

Under the transaction, a wide number of employees in each firm will be invited to purchase 51% of the equity of their respective firms.

Bank contracts face FDIC cuts

By Joel Chernoff

WASHINGTON — Federal guarantees for pension fund investments in bank products — including bank investment contracts — would be curtailed under a House proposal revamping the deposit insurance program.

Given the souring economy and weakened state of the banking industry, the overall issue of deposit insurance reform promises to be a hot topic in the next Congress. How legislators deal with the narrower issue of coverage of pension fund investments, however, might take a variety of forms, including elimination of coverage beyond $100,000 per plan or assessing an additional premium for increased coverage.

Meanwhile, House Banking Committee Chairman Henry B. Gonzalez, D-Texas, argued pension funds are not entitled to receive federal insurance of $100,000 per plan participant.

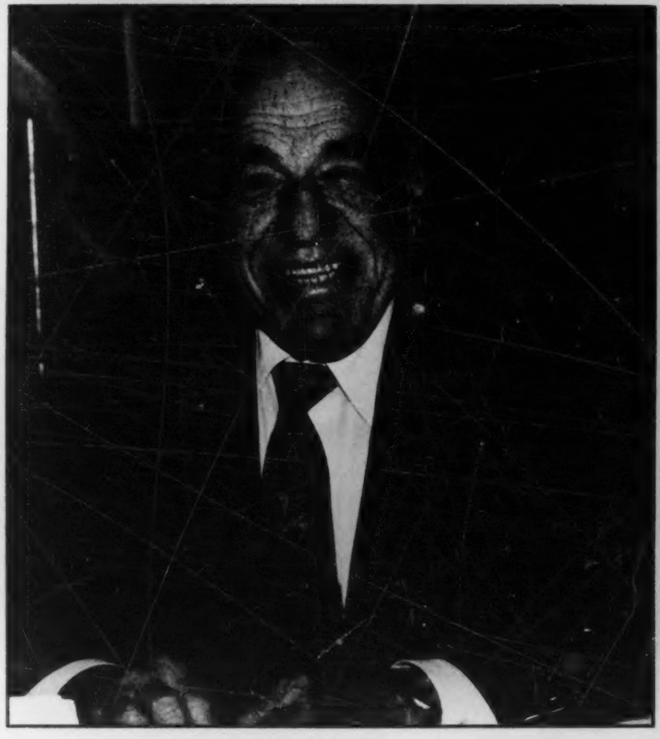
"These are funds placed by professionals, who ought to be able to evaluate risks for themselves and certainly shouldn't be rewarded for placing huge sums in weak institutions," Mr. Gonzalez said in a statement read on the House floor.

Testifying before the House banking panel Sept. 13, Federal Reserve Board Chairman Alan Greenspan said Congress could study "the desirability of limiting pass-through deposit insurance."

Under Federal Deposit Insurance Corp. rules, federal deposit insurance, normally limited to $100,000 per account, is "passed through" to a retirement plan's participants. Thus, a pension plan can obtain millions of dollars of deposit insurance for each bank investment.

Mr. Gonzalez plans to introduce legislation overhauling the entire deposit insurance program before Congress takes its October recess. He also would toughen capital standards, force regulators to take quicker action, make bank holding companies responsible for losses and limit deposit insurance

See **FDIC coverage** *on page 51*



Texas Democrat Henry B. Gonzalez, chairman of the House Banking Committee, is against federal insurance protection for pension assets deposited in banks.

Fluor, which helped upgrade this U.K. refinery, is commingling its defined benefit and defined contribution assets into unitized pools.

Fluor restructures

Assets of 16 plans commingled

By Joel Chernoff

IRVINE, Calif. — In a novel arrangement, Fluor Corp. has set up a mutual fund-type structure for its $1 billion in defined benefit and defined contribution plan assets.

The process, started three years ago with the creation of a master trust, enables Fluor to commingle its retirement plan assets and then invest them in unitized asset pools. The result is Fluor was able to reduce its roster of money managers and trim administrative expenses while optimizing each of its retirement plans' asset allocations.

Seeds for the new approach were sown last spring, when Fluor investment officials embarked upon "a massive equity analysis" to see if there was "any way we would save a little on fees while getting the right tilt" for the fund, said Eileen Delasandro, assistant treasurer and director-investments for the engineering and-construction services firm.

The process has reduced the number of stock managers to eight — including a new internally managed portfolio — from

See **Mutual funds** *on page 55*

Dutch funds conquering fear of equities

By Margaret Price and Curtis Vosti

Partly in a quest for higher returns, Dutch pension funds are shedding some of their old concerns and are gravitating more toward equities.

While Dutch funds are still heavily wedded to fixed-income investments, a new survey by Bank Mees & Hope N.V. in Amsterdam shows pension funds in the Netherlands, on average, ideally would like to invest 20.3% of their assets in equities, up from an average 8.35% at year-end 1988.

That, in turn, means greater foreign investments because the Dutch stock market is relatively small. The Bank Mees & Hope survey found funds ideally would want about half of their equity investments to be in non-Dutch stocks.

"It's a more professional industry than before," said Philip Lambert, chairman of the Netherlands Association of Company Pension Funds, which consists of about 350 companies with about $60 billion in assets. Mr. Lambert said organizations like his have helped Dutch pension funds understand U.S. and U.K. asset allocations and their greater use of equities. "Research has gradually been coming over the Channel to the Continent," he said, which has changed the attitudes of the Dutch funds toward risk.

This is good news for international money managers, some of whom are stepping up their marketing efforts to Dutch funds. According to Alan McFarlane, director in charge of European institutional business at Ivory & Sime PLC, Edinburgh, Scotland, the Dutch pension market is the most attractive in Europe now because of "clear signals from that market that there is a desire for increased international exposure that won't be direct investments but that will arise from the use of money managers."

Among the larger funds ex-

See **Dutch funds** *on page 52*

NEWS DIGEST

Photo by Mary Herlehy

SPECIAL REPORT: REAL ESTATE

Participants in *Pensions & Investments*' real estate roundtable analyzed institutional investing issues — from pension funds' cash flow needs to European realty. Page 23.

FINANCING

Commercial banks are dominating market niches, and starting to rival their investment banking counterparts as private placement powerhouses. Page 3.

Profits from European M&A activity won't be enough to save U.S. investment banks, Moody's predicts. Page 30.

Comdisco's multicurrency credit facility might be the only one of its kind, but not for long, according to some experts. Page 46.

INTERNATIONAL

Dutch pension funds' reluctance to move from fixed-income investments in favor of higher equity exposures is becoming a thing of the past. Page 1.

Puerto Rico Electric Power Authority won't cooperate with the country's commission overseeing other public pension funds. Page 44.

Two Chicago exchanges plan launches of derivative contracts based on Japanese securities, but liquidity is key for success among institutions. Page 55.

REAL ESTATE

First National Bank of Chicago has filed suit in federal court seeking permission to pursue a restructuring of its Fund F. Page 4.

J.P. Morgan has secured $416 million in financing from Sumitomo Life Insurance Co. for a sale-leaseback of a London office complex. Page 25.

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Consultants survey is under way

Pensions & Investments' questionnaire for the annual directory of investment management consultants is in the mail. To be included in the Nov. 12 directory, questionnaires must be returned by Oct. 14. If your firm has not received a questionnaire, or if you have any questions about the survey, please contact Christine Philip, directory coordinator, at (312) 649-5217.

State tackling liabilities

West Virginia OKs defined contribution plan, equities

By Curtis Vosti

CHARLESTON, W. Va. — The West Virginia Legislature has voted to create a defined contribution plan for the struggling Teachers' Retirement System and to allow state pension funds to invest in equities for the first time.

The measures were passed Aug. 31 in a special session called to deal with educational issues. The $200 million Teachers' Retirement System, with $3 billion in unfunded liabilities, was the main issue.

But as the session developed, a slew of measures passed covering the state's four pension funds: the teachers system, which will be 50 years old in 1991; the $1.2 billion Public Employees' Retirement System; the $11 million Judicial Employees' Retirement System; and the $40 million Public Safety Employees' Retirement System.

Beginning July 1, 1991, new teachers will be covered by a defined contribution plan. It will be funded through an employee contribution of 4.5% of payroll, with the state kicking in 7.5% of payroll, with another 7.5% contributed to the defined benefit plan.

The state also has earmarked an additional $80 million contribution to the defined benefit plan this year, and will look at continuing that extra contribution.

"The whole idea in the start of a new system is to cut off the bleeding in the old one," said Willard M. Ansel, teachers system administrator.

"The Legislature was concerned about the underfunding. They didn't want to see it grow," said Assistant Treasurer Jerry Simpson. "The state is trying to address the problems of the retirement systems now rather than pass the buck to a future Legislature or governor."

Legislators voted to allow equity investments by all four systems after seeing a study that showed no unfunded liability if the teachers' system had been allowed to invest 40% of its portfolios in equities in the past 30 years. The legislation sets a 20% cap on equity investments.

Other changes include the establishment by Jan. 1 of one oversight board for all four systems and a centralized accounting system. Now, each retirement system has its own board, which will be terminated six months after the overall board is established.

The investments for each of the systems will continue to be handled by the State Board of Investment.

The legislation also ended a technical distinction in the public employees' system that was written into the 1961 law creating the system. At the start, the system had separate accounting for the state employees and the municipal employees covered by the system. But the state employees' system is about $100 million underfunded, while the municipal employees' portion has a $140 million surplus.

The new legislation ends that separation, making the public employees' system fully funded and allowing state and municipal governments to lower their funding to 3.5% of payroll from 6%.

The legislation also makes permanent an ad-hoc legislative oversight committee that will have jurisdiction over all pension-related issues and legislation.

The committee also is charged with coming up with a plan to deal with the unfunded liability, of which equity investing is looked upon as part of the solution. The treasurer's office had sought last year to allow equity investments, and requested a 35%

See **State** *on page 53*

McDonnell Douglas eyes more annuities

By Barry B. Burr

ST. LOUIS — McDonnell Douglas Corp.'s purchase of a group annuity for salaried retirees will produce a $234 million after-tax gain in the third quarter, but no cash windfall. The company is considering purchasing group annuities for other participants in its pension plan.

The earnings gain was an outcome but not the reason the company purchased the annuity, said Richard M. Smoski, director-pension and savings administration.

McDonnell Douglas transferred its pension obligations for 14,200 salaried retirees by purchasing the annuity from Metropolitan Life Insurance Co., New York. Company executives declined to disclose the cost or other terms of the annuity. The annuity likely is one of the largest purchased by a company in recent years.

As a result of the transaction, the company will record a $6.11 per share after-tax gain in the third quarter. According to Zacks Investment Research, Chicago, the consensus earnings forecast by securities analysts for McDonnell Douglas before its pension accounting gain had been 60 cents a share for the third quarter. A year ago, it earned 98 cents a share.

"We thought we'd do it because it would strengthen the security for retirees" by taking the volatility out of the investments backing these benefits and by guaranteeing all benefits, through an insurance contract, above the level allowed under the protection of the Pension Benefit Guaranty Corp., Mr. Smoski said.

"MDC has looked from time to time at purchasing an annuity," he said. "The time was right, the investment was right." Favoring interest rates "kind of related a little bit to that" decision.

He said the corporation's companywide cost-cutting drive had no bearing on the move. He expects no cutbacks in pension department personnel. McDonnell Douglas, in fact, will continue to administer the benefits for those retirees, as it now does for all participants, including the issuing of checks and handling inquiries.

The Metropolitan annuity takes effect Oct. 1, when the insurer transfers its first payment to McDonnell Douglas' bank accounts, funding the checks the company will issue to retirees. For the retirees there will be no noticeable change, Mr. Smoski added.

He said the company is studying the possibility of buying group annuities for other participants, such as non-salaried retirees. The company has about 31,000 others receiving benefits and 160,000 employees and retirees altogether. The salaried retirees were done first because the company had done more analysis for the group already, he said.

Alexander & Alexander Services Inc., New York, assisted McDonnell Douglas in preparing and analyzing annuity bids sent out to insurance companies, he added. He declined to say how many carriers were solicited.

Mr. Smoski said the annuity purchase was the decision of the pension department, his office and the investment review committee. He declined to discuss other aspects of the company's pension investments or its effect on pension expenses.

"It doesn't look like that big of a deal," Kent Newcomb, securities analyst at A.G. Edwards &

See **Annuities** *on page 53*

Treasurer chastises city fund

By Trudy Ring

CHICAGO — City Treasurer Miriam Santos has blasted the Chicago teachers' pension fund for losing money and moving too slowly on diversification — charges the pension board president said are not justified.

The $3.6 billion Public School Teachers' Pension and Retirement Fund of Chicago lost about $136 million from June 30 through Sept. 6, which Ms. Santos, custodian of the fund, said would not have happened if the fund were properly diversified.

Judy Cheris, president of the pension fund's board, responded that the loss was due to equity market gyrations. "Any fund that is invested in equities took the same hit," she said. Actually, the fund probably took less of a hit than some others because it is only about 30% invested in equities, Ms. Cheris added.

The Standard & Poor's 500 Stock Index lost 10.5% in the same period.

Ms. Cheris added, however, she realizes a higher equity allocation will produce better-long term returns, and that the fund shouldn't try to time the market.

The fund has been in a process of diversifying its

See **Teachers** *on page 51*

Bethlehem halves plan underfunding

By Trudy Ring

BETHLEHEM, Pa. — Bethlehem Steel Corp. has cut its unfunded pension liability by more than half in the past three years and could eliminate the deficit by 1993.

The unfunded portion of Bethlehem's accumulated benefit obligation stood at $759 million June 30, down from $1.75 billion at the beginning of 1987, said Gary Millenbruch, senior vice president and chief financial officer. He stressed, however, continued profitability is key to wiping out the underfunding by 1993.

Bethlehem took a big chunk out of the deficit in 1988 by giving the pension fund $170 million in proceeds from a stock offering (*Pensions & Investments*, Aug. 8, 1988). It contributed a total of $700 million to the fund that year. Contributions totaled $360 million in 1989 and $160 million in the first half of 1990.

"Our current thinking, subject to profitability, is that we will contribute through the balance of the year at roughly $20 million a month," Mr. Millenbruch said. The steelmaker has had 15 consecutive profitable quarters, and product demand and other business conditions are such that profitability is likely to continue, he said.

With the exception of the stock offering proceeds, all contributions have come from internally generated cash flow.

Getting the deficit paid down, and eventually paid off, will help the entire capital structure of the company, he said. One aspect of this is further improvement in Bethlehem's credit rating, now just a notch below investment grade, Mr. Millenbruch said. The rating has moved up several notches in the past few years.

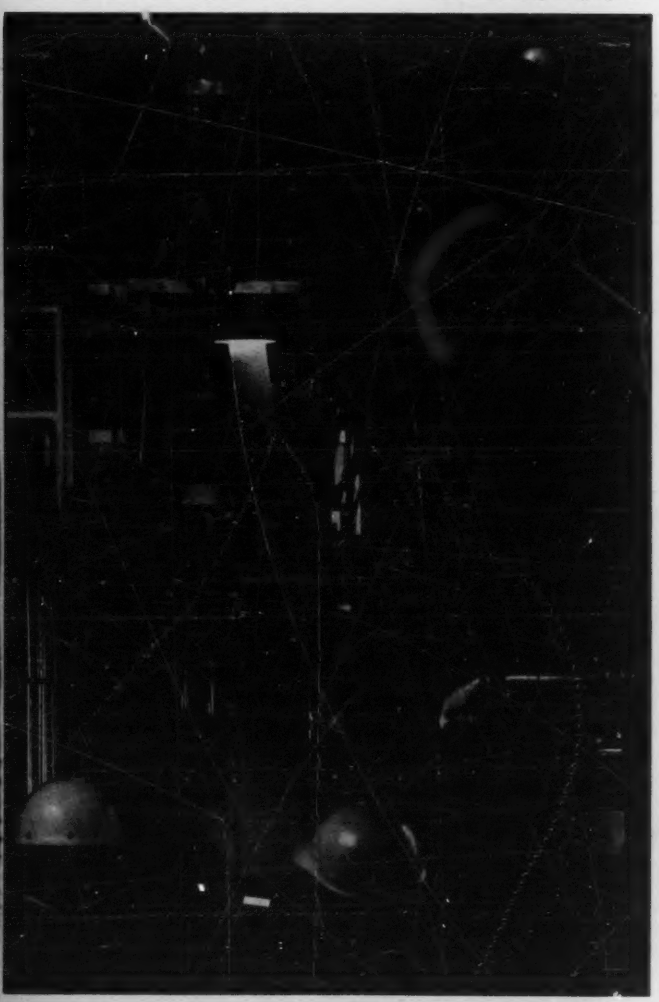
Better pension funding also will bring about reduced pension expense and enhanced competitiveness, he added.

Institutional investors seem to be taking note of Bethlehem's improving financial condition. According to CDA Investment Technologies Inc., Rockville, Md., institutional ownership of the company's outstanding shares rose to 70% as of June 30, up from 57.2% on June 30, 1985.

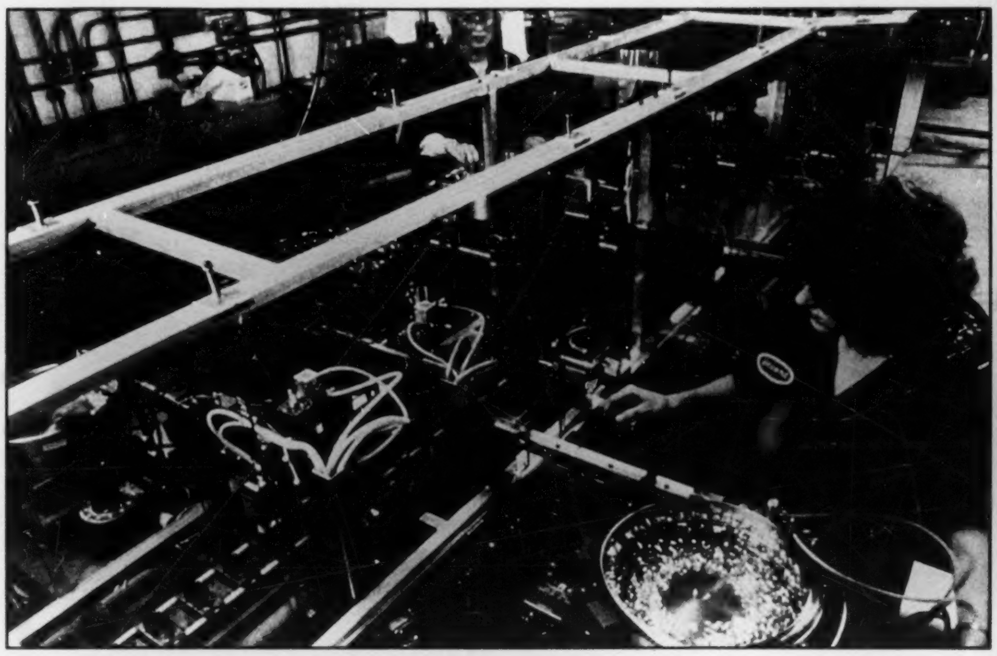
Research analysts also are pleased with Bethlehem's effort to reduce the pension deficit. A recent report by Prudential-Bache Securities Inc. calls Bethlehem's financial position "very strong" and notes the expected elimination of the pension shortfall.

Not all is rosy; Bethlehem has had a recent reduction in profits, largely because of the cost of a major revamping of its plant in Sparrows Point, Md., according to Prudential-Bache. Second-quarter earnings were 21 cents per share, on a fully diluted basis, compared with 98 cents per share a year earlier, and analysts expect two or three more quarters of poor earnings comparisons. Bethlehem's common stock closed at 11⅞ Sept. 10, after having been

See **Liability** *on page 54*



Officials of Bethlehem Steel believe they can eliminate the $759 million pension fund deficit in three years.



Inspiring ADC Telecommunication's employees is a goal of the company's matching contribution.

Redesigning stock plans

Companies tie benefits to corporate performance goals

By Hillary Durgin

In a twist on defined contribution plan design, a small but growing number of employers are using company stock to match employee contributions, and tying part of their match to company performance.

For the employer, the design might be a way to bolster long-term stock value and control benefits costs. For the employee, the stock match means an ownership stake and hopefully an incentive to improve company performance.

ADC Telecommunications Inc., Bloomington, Minn., is among the latest companies to use this approach.

"It's becoming more of a trend because we're becoming much more performance oriented in plan design," said Richard Koski, benefits consultant with Buck Consultants Inc., Secaucus, N.J., "It's incentive for employees; it's cost control for the employers," added Mr. Koski, who has no connection with the ADC plan.

The new twist incorporates aspects of employee stock ownership plans, which have become a popular vehicle for contributing stock to 401(k) plans. Unlike these plans, also known as KSOPs, which often are leveraged and obligate the employer to make a fixed contribution all in company stock, this new model combines a guaranteed cash match with a performance-based stock match.

"There are clearly more companies that are looking at having part of their match based on performance," said Joseph Hessenthaler, principal with TPF&C, Philadelphia.

Several consultants interviewed reported a growing number of companies taking this tack, but declined to identify them.

Employers establishing these plans view tying incentive to retirement benefits as a way to improve short-term performance and hopefully increase the company's value in the long term.

ADC, which implemented its plan in January, has used the new design to give employees a stake in quality and production improvements that were instituted companywide. It is a combination of a 401(k) and a non-leveraged ESOP.

For ADC, which markets its

See **Performance** *on page 53*

Banks gain in private placement

By Marlene Givant Star

Commercial banks are emerging as private placement titans, having placed one-third of the volume of deals in the first half of 1990.

Even as the market contracted sharply during the six months, J.P. Morgan & Co. ranked with two investment banks — Goldman, Sachs & Co. and Salomon Brothers Inc. — among the top three private placement agents overall with $5.2 billion of deals.

Other commercial banks did not come close to Morgan in terms of total volume, but did stand out as significant players in small but diverse market segments.

Chase Manhattan Bank led in acquisition-related financings and Citicorp garnered first place in non-investment-grade private placements. Morgan captured second place in securitized placements and plain-vanilla debt.

"Virtually off the map in 1980, nine of the top 20 placement agents in 1990 — holding 33% of the market — are commercial banks," said a report from IDD Information Services Inc., New York.

That compares with a share of only 19% in 1987.

While investment banks — led by Goldman, Sachs — still head the league tables in straight debt and equity placements, commercial banks are carving a niche in other sectors. Four of the top six agents on securitized private placements were commercial banks, as were nine of the 15 agents representing foreign issuers placing U.S. securities. The latter category represents a healthy 15% of the private placement market.

All three of the top ranked commercial banks said they are focusing heavily on international private placements. Half of J.P. Morgan's private placements business is outside the United States; Citicorp is in the process of staffing up on the origination side in private placements in Western Europe; and Chase recently sent an executive to its London headquarters to spearhead its European private placement effort.

Chase and Citibank officials both said their banks are emphasizing energy deals and focusing on other specialty industries. But Chase is focusing on middle market transactions while Citibank's niche is deals of $50 million or more.

In spite of all of the talk about the private placement market's explosive potential, it didn't fare well in the first half of 1990.

Domestic private placement financings dropped for the first time in more than 10 years, according to IDD. After a decade of steady growth, the private market has been hit even harder than the public new issue market during the Iraq uncertainty.

In 1980, private placements accounted for 22% of the $73.3 billion U.S. domestic securities market. Their market share grew to 38% of the $479.5 billion total market in 1989. The first half of 1990 finds private placements with only a 26% share, according to IDD.

Overall private placement volume plummeted 32.5% during the first half of 1990, to $56.8 billion from $84.1 billion during the

See **Placement** *on page 54*

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Equity ▪ Balanced ▪ Fixed Portfolios

Bank fights bac

Suit seeks Fund F restructurin

By Terry Williams

CHICAGO — In an unusual move, First National Bank of Chicago is seeking court permission to restructure its $550 million Fund F over the objections of six pension fund sponsors.

Meanwhile, in August, the $4.3 billion Illinois Municipal Retirement Fund became the second pension fund to file suit over its inability to get back its investment in the open-end real estate commingled fund. The $2.2 billion BP America Inc. pension fund, Cleveland, sued FNB Chicag May for the company's $17 lion investment (*Pensions & vestments*, July 9).

Seven pension fund spons and two investment advisers now snared in the web of liti tion that surrounds Fund F.

The suits arise from the quests of 15 of the fund's 45 ticipants to withdraw a tota $135 million, or 25% of Fun the bank's suspension of wi drawal processing; and its posed restructuring of the fu The restructuring would offset likely impact on the fund of ing properties in a down real tate market to meet the wi drawals.

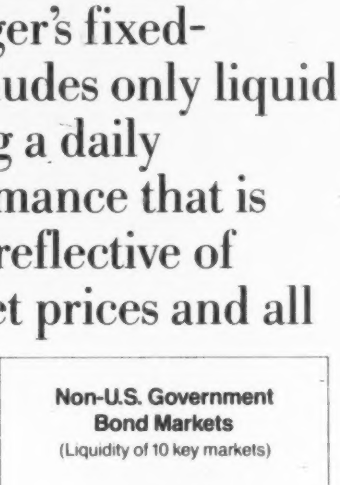
Many of the withdrawal quests were spurred by the fu poor performance in recent ye

The FNB Chicago suit, file

See **Restructuring** *on pag*

Finally, a global bond index based on government bonds that actually trade.

By tracking only actively traded bonds, the J.P. Morgan Government Bond Index is the fairest way to measure an investment manager's fixed-income performance. The Index includes only liquid issues in each of 11 markets, providing a daily benchmark for your portfolio performance that is based on reliable prices and is more reflective of actual market risks. With daily market prices and all settlement and interest calculations performed according to individual market conventions, the Index is becoming the preferred benchmark for investor performance in the global bond markets.



With international bond markets varying widely in liquidity, an investment manager's portfolio can have a very different market exposure from a benchmark that includes illiquids.

For more information on
the J.P. Morgan
Government Bond Index,
call your consultant, or
Sharon O'Connor,
J.P. Morgan Securities Inc.,
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CORRECTIONS &
CLARIFICATIONS

- An Aug. 20 story contai some misinformation about Special Growth Stock Accoun of **Equitable Capital Mana ment Corp.**, which finished ond in the quarter among the s cial equity funds in the PIP universe. The article should h read:

According to Barry Feirst portfolio manager, the $45 mil account normally holds 50 iss He looks for companies under ing fundamental change that accelerate earnings growth. " try to get into the stock before change is recognized by the m ket," he said citing Shorew Packaging Corp. as an exam The fund has big weightings biotechnology firms, cellulars companies that control hea care costs. Pall Corp., since s is one stock that contributed the second-quarter performan

- In the Aug. 20 PIPER rep the **FTA World Index** and **F EuroPac Index** were incorre reported to *Pensions & Inv ments*. The correct returns for FTA World Index were 7.38% the second quarter, 7.1% for year, 6.6% for three years 22.28% for five years. The F EuroPac Index returns w 8.51% for the second quar 2.98% for one year, 5.72% three years and 29.03% for years. Three- and five-year turns are annualized.

- As of Jan. 1, 1990, **Har Capital Management** mana $921 million in tax-exempt ass compared with $1.122 billio year earlier — a 17.9% dr rather than the 39% drop repo in the Sept. 3 issue. Harbor C tal originally had given *Pens & Investments* a year-earlier ure of $1.497 billion, which presented total, not solely tax-empt, assets under manageme

Also, **Securities Coun Inc.**'s tax-exempt assets un management did not fall to degree reported in that sa story. The firm manages $ billion in tax-exempt ass down only 5.4% from last ye $1.195 billion.

- The Multiple Markets In in the Sept. 3 **Statistica Speaking** contained an inco date. All data were as of June

COMMENTARY

Performance is useless in selecting managers

By Edgar W. Barksdale and William L. Green

Illustration by Richard Sterguiz

Historical performance ranking, the primary consideration in most investment manager selection decisions, is a useless, random statistic. In an analysis we've completed using a data base covering 15 years, we asked if past performance was any guide to expected future performance. Our research clearly shows the absence of any predictive value in historical performance rankings of money managers.

Performance statistics, of course, are seductive, because the numbers appear to provide one of the few "concrete" or objective elements of the selection process. But choosing managers is not a numbers game.

Over the years, the industry has learned two dominant factors contribute to a sponsor's successful investment program:

- Suitable investment objectives and policy; and
- Successful selection of the investment managers to implement the policy.

Sponsors have developed broad investment policy guidelines with which they are comfortable. The continuing struggle, however, is in the area of implementation, namely, in the successful evaluation of investment managers. Selections, to a worrisome extent, have resulted in disappointing performance and costly turnover of investment managers.

Countless hours of research and amounts of money have been spent by institutional investors seeking to enhance performance of their investment portfolios. As employee benefit fund assets increase in size, both in absolute terms and in terms relative to the net worth of the sponsoring organizations, the impact of even modest incremental returns easily justifies the use of considerable internal and external resources. All of these efforts notwithstanding, the ongoing turnover of investment management relationships, generally after a substantial period of poor performance, demonstrates the manager selection process is an inexact science and probably close to an art.

Looking back over the period since the enactment of the Employee Retirement Income Security Act of 1974, it's appropriate to examine what we can learn from the industry's practices in managerial selection.

In our analysis, we examined a series of rolling 10-year intervals spanning the period from the end of 1974 through 1989, using a data base of more than 144 equity portfolios, all entending over the full 15-year period, managed by 135 firms. The portfolios' total market value exceeded $22 billion at the end of 1989.

We asked the question of whether knowledge of a manager's ranking during the first half of a decade would be useful in selecting an *above average* manager for the second half of the decade. The accompanying table shows the results of this analysis. To illustrate one of the findings: Of the managers in the top 20% of the sample for the five years from 1980 through 1984, only 45% of them were in the top half during the 1985-'89 period.

Scanning the table, no useful predictive pattern emerges. In the best result of the six 10-year periods that were analyzed, only 55% of the managers in the first or second quintile during the initial five-year period were able to finish above average in the succeeding five years.

For eight of 12 observations of managers who performed best by finishing in the first or second quintiles during the six initial five-year periods, less than half were able to do better than average during the second half of the decade. Revealingly, the subsequent performance of the bottom two quintiles is barely distinguishable from — and certainly no worse than — that of the top two quintiles.

Many institutional investors, oddly, are quick to acknowledge that past performance is not predictive. Yet, after intense "analysis," they tend to be drawn to the managers with the best performance rankings in the past five years. Performance records are more helpful in understanding a manager's investment style, consistency and volatility characteristics than in evaluating ability to produce future superior investment returns.

Qualitative judgments, which we consider much more likely to produce successful long-term choices of managers than *quantitative* judgments, are much more difficult to make. They require far greater depth of knowledge of the manager candidates than is typically practical for, or practiced by, the committee making the selection. Because most committees simply do not spend enough time on the process to be comfortable in making qualitative choices, their decisions are driven by the historical performance numbers.

If the historical performance screen has no discriminating value, to what then should a plan sponsor turn?

We have identified several characteristics — unrelated to investment philosophy, asset class under management or even geographical focus of investing — that are helpful in identifying managers that tend to achieve superior, long-term results.

- Independent thinking. A portfolio manager must, largely through his own evaluation of available information, adopt non-consensus views and build non-consensus portfolios.
- Unencumbered decision-making. If the process to follow through with original ideas is difficult, then only easy and generally less-rewarding decisions will be made. Complex, time-consuming hierarchical information flows within management organizations or large formal committees make decisions more difficult.
- Personal discipline. Successful portfolio managers tend to be highly focused, intense and enthusiastic in their pursuits, whether professional or recreational.
- Flexibility. Portfolio management requires a great commitment to change. All investments must be reviewed continually, reflecting the newest and best available information. The successful manager must always be willing to reverse his earlier decision, regardless of whether it was good or bad, without the slightest hesitation.
- Love of the business. The most successful managers view investing as a personal passion. Although the job pays well, most would do it as an avocation.

The application of these judgmental characteristics requires more time than the typical committee of senior executives spends on the process. It becomes an ad hoc exercise in which a pension officer is forced to quantify and slot a group of managers. It leads to numerically driven selections and avoids difficult qualitative judgments.

A poor performance ranking might indicate more serious problems, but it is important to keep in mind that a poor ranking is a symptom, not the disease. Existing managers, whether performing well or poorly, should be re-evaluated using the same criteria as a new manager. An existing manager who wouldn't be hired today should be terminated.

More successful selections of managers will occur if committees devote the time necessary to fully evaluate managers under consideration, or fully delegate the selection to senior executive staff who have the experience to analyze candidates and who can be held accountable for performance.

Consultants can serve a useful role in rapidly moving their clients up the learning curve. All too often, however, they provide comfort that a sponsor has done a thorough job with relatively little effort.

Pension fund investment, although a good return is its bottom-line objective, is by no means a performance driven selection process. ■

Edgar W. Barksdale is a managing director of RCB International Inc. and president of RCB Trust Co., both based in Stamford, Conn. William L. Green, also a managing director of RCB International, is executive vice president of RCB Trust.

History is bunk

Percent of managers performing above median during second half of decade

Quintile ranking of manager during first half of decade	1980-1984	1981-1985	1982-1986	1983-1987	1984-1988	1985-1989
1st	31%	52%	48%	45%	48%	45%
2nd	45	55	52	41	41	52
3rd	37	50	57	61	61	43
4th	63	48	45	55	55	48
5th	57	45	48	48	45	57
Decade analyzed	1975-1984	1976-1985	1977-1986	1978-1987	1979-1988	1980-1989

Source: RCB International Inc.

LETTERS TO THE EDITOR

Social investing isn't odd

■ Your Aug. 6 article, "A Portfolio's Odd Criteria for Investing" contains inaccuracies that require correction. A casual reader might have gotten the impression that the Domini Social Index consists of small-cap stocks. In fact, 250 of the 400 DSI companies are in the Standard & Poor's 500 Stock Index. The average market capitalization of DSI companies is $10.832 billion.

The article asserts Lillian Vernon Corp. "on closer look, has only one woman, aside from its chief executive, in the ranks of its top executives." The company's current reports show four female officers.

The DSI contains no automakers because of their defense work. However, the omission does not, as you imply, reflect a bias against them. If Ford sells its defense unit, as it has announced, we will consider it.

Whether pharmaceutical firms should divest in South Africa is a question best answered by South Africans leading the anti-apartheid campaign. Neither Bishop Tutu nor Mr. Mandela has excepted drugmakers. We sought for the DSI 400 companies that do business honestly, produce quality work, emphasize safe, healthful products, are involved in their communities, offer equal opportunities to women and minorities and have outstanding employee relations. What's "odd" about these criteria?

Peter D. Kinder

President
Kinder, Lydenberg, Domini & Co.
Cambridge, Mass.

Editor's note: The column made no mention of the Domini's index's market value. Based on Mr. Kinder's figure, it's $4.7 trillion. That's more than twice the size of the S&P 500's roughly $2 trillion. This difference was noted to Mr. Kinder in a conversation to report the article. He said he was unable to explain it, and still hasn't. On automakers, the column clearly states the index excludes them because of their defense interests. On the number of women holding top jobs at Vernon, based on Mr. Kinder's research, the column was wrong.

Investment 'silliness'

■ I read your Aug. 6 column on the often silly and "odd criteria" adopted by some investment managers and some investors. You certainly do hit the proverbial nail on the head in your short editorial. I want to commend you on bringing this to the attention of a wide audience. Sometimes I'm amused myself with the "do-good" attitude adopted by some investment decision-makers such as now exist in a good number of areas of attention in our country.

Also, so-called "sanctions" are often equally inappropriate. That's another important subject at the moment due to the imposing of sanctions on Iraq by our president (and the United Nations). I hope you continue to point out to your wide readership the trivial basic concepts adopted on occasion by investment decision-makers.

Paul Garner

Dean emeritus
The University of Alabama
Tuscaloosa, Ala.

N.Y. 'pension bank' near

Fund assets to be earmarked for targeted investments

By Hillary Durgin

ALBANY, N.Y. — New York is edging toward creating a "pension investment bank" as a means to steer public and corporate pension funds toward economically targeted projects.

A new report by the state's Industrial Cooperation Council, a governmental advisory group, endorsed the pension investment bank, which was proposed last summer by Gov. Mario Cuomo's Task Force on Pension Fund Investment. The state's 1990 budget earmarked $200,000 to hire staff and consultants for the entity.

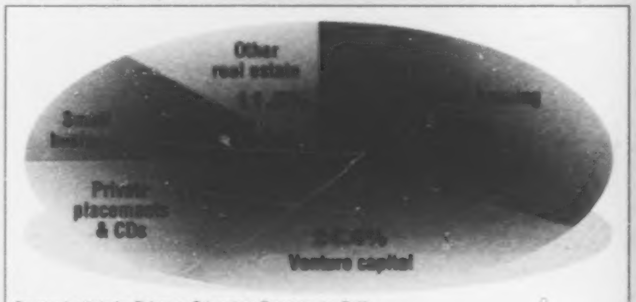
"Public and private pension funds in New York state are in a good position to play a leading role in this development," said the report. "The state needs to work in cooperation with the funds to develop creative, yet practical, methods and mechanisms to expand the use of targeted investments."

The new investment intermediary is expected to be operational within three months, complete with an independent board of directors, its first targeted investment and pension fund investors.

Lee Smith, executive director of the Industrial Cooperation Council and a co-author of the report, said the aim of the intermediary would be to increase "significantly" the amount invested in in-state investments, but there's no dollar target or formula as to percentage amounts. Mr. Smith did not know how much is currently invested.

Public pension funds' use of targeted investments

IFE surveyed 99 public pension funds, of which 41 reported using economically targeted investments.



Source: Institute for Fiduciary Education, Sacramento, Calif.

Graphic by John Hall

The state, through the new unit, would seek to address two principal barriers to economically targeted investments: the lack of staff and resources to research the investments, and the lack of opportunities to do coordinated investing that would spread the risk and the cost among investors.

The new investment unit would have several functions, including "identifying, screening and packaging new investment programs for participating investors and diversifying the geographic and credit risks associated with instate investment products," according to the report.

Among the best investment possibilities are mortgages for housing and private placement loans to finance new plants and equipment for small and medium manufacturers, the proposal said. The intermediary also could explore investments in commercial real estate, venture capital and, ultimately, certain types of corporate financing, employee stock-ownership plans and education loans.

The idea of an investment intermediary originally was proposed by Comptroller Edward V. Regan to then-Gov. Hugh Carey in 1981. At about the same time, California had a pension investment unit that functioned within the governor's office to create jobs and finance housing in the state. The California unit was not renewed with the change of administrations in 1983.

While Mr. Regan supports the concept of an investment intermediary and agrees with the general thrust of the report, he said it overemphasized the benefits pension investments provide to state economies.

"The report tends to exaggerate the impact public pension fund investments can have on the state's economy — it uses economic development 'hype' that often accompanies grants, tax exemptions and other concessions," Mr. Regan said in a prepared statement. "Job creation results in these situations are often promised but, as our audits show, are rarely delivered."

Mr. Regan also said good investment performance by the pension fund helps reduce state contribution levels, freeing up assets to pay for taxpayer needs and keeping taxes down.

In an interview, Mr. Regan emphasized the investment unit should not try to initiate investments, but should target ventures already undertaken by the private sector.

"I think the notion of them calling it a bank . . . and trying to generate new business . . . is completely wrong," Mr. Regan said.

He said similar efforts in Eastern Europe failed. "This is industrial planning." He said, however, "that doesn't mean that the initial concept of nine years ago isn't overdue."

Mr. Smith said there always are initial concerns regarding anything new. What's more, he said, the lack of profitable, economically targeted investments so far has stemmed from a lack of resources to allocate toward researching them.

"Economically targeted investments are new products, and every new product has a research and development and start-up cost associated with it," Mr. Smith said. "Our role is to in effect, jump-start the product development process."

Another barrier has been the relative lack of profitability these types of investments produce for the institutions that structure them, said Mr. Smith.

To mitigate concerns raised by last year's task force report that pension funds were being asked to engage in social investing, the new study stresses returns on pension fund investments should not be concessionary and that participation in investments recommended by the pension investment bank would be voluntary.

The release of the final report had been held up for several months while the Legislature tried to erase a $2 billion budget deficit. The budget proposed by Gov. Cuomo drew criticism from Mr. Regan and union groups for drawing half of the assets needed to ease the deficit by slashing the state's pension contribution.

Among other things, an amended funding formula, called the projected unit credit method, virtually eliminates employer contributions to the $44.2 billion New York State & Local Retirement Systems in the next several years.

As a result of the change in the funding formula, some union groups that have supported targeted investment programs because of their tendency to bolster union employment are rethinking their stance. ●

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Evolution in the making

Defined contribution plans changing to fill new needs

By Fred Williams

Defined contribution plans ave undergone significant rowth and change during the ast two years in response to proosed governmental regulations, volution in participant demands nd changing market conditions.

According to a soon-to-be-reeased study of large employers by he Wyatt Co., there are more deined contribution plans offering ore investment options and ore 401(k) features covering ore employees than in a similar urvey conducted in 1987. The ew survey covers 740 employers n 1989 and 1990 with a total of .9 million employees.

"Overall the survey confirms here has been a lot of growth and hange (in the defined contribuion sector) and there will be a lot ore change to come," said Tim Hankins, defined contribution onsultant in Wyatt's Los Angeles ffice.

One big change since 1987 is the ramatic increase in the number f plans offering four or more inestment options for both emloyee and employer contribuions. The number of plans with our or more options for employee contributions increased to 43% rom 24% in 1987. For employer contributions, the number jumped o 28% from 17%.

Mr. Hankins said the increase is due to the pending Department of Labor regulations pertaining to section 404(c) of the Internal Revenue Code that would reduce employer fiduciary responsibility for some defined contribution plans ffering four specified investment hoices.

The most popular investment ptions offered by defined contriution plans are guaranteed inestment contracts, which dislayed a monumental increase in se by plans offering from one o four or more options for emloyee contributions. GICs were ffered by 75% of plans with one o three options, up from 40% in he 1987 study, and 73% of plans ith four or more options, up rom 60% in 1987.

Mr. Hankins said he does not nderstand the reasons for the inrease. "I would have thought hat GICs would have been just as opular in 1987 as they are now; 'm surprised it was so low in 987," he said.

Cash flows for participant and irected funds show GICs are by ar the most popular investment, athering an average of 60% of sset investment dollars.

By contrast, money market unds attracted 23% of investment ssets; balanced funds, 24%; diersified (equity) funds, 21%; and ompany stock, 36%.

GICs have been the acknowledged reference of defined contribution lans for some years but Mr. Hankins said he believes the GIC wave ight soon begin to slow.

"Right now things are heavily eighted toward GICs," he said. 'But as participants begin to get ore sophisticated and knowledgeable in the investment field, I believe ou will probably see some moveent away from GICs."

For the first time the new study lists real estate among defined contribution choices, gathering 7% of assets in 1989.

"This is a new trend," said Mr. Hankins. "There seems to be more interest in aggressive equities and real estate. For real estate, my guess is that as you begin to offer more funds and options to participants, you start getting away from the standard equity, money market, GIC, balanced and growth funds and start getting into specialty funds.

"There has been a concept in the U.S. that real estate is a good investment over the long term and real estate has been a significant part of the insurance industry's portfolio for years. They may now be leveraging off that expertise by offering it as an option."

Overall, according to the Wyatt study, 88% of survey respondents sponsor capital accumulation (defined contribution) plans for their salaried employees and 72% have defined benefit pension plans; 49% of all the capital accumulation plans are thrift/savings plans with a 401(k) option; 23% are profit-sharing plans with a 401(k) option; and 10% are 401(k) arrangements that have no employer contributions other than employees' elective deferrals.

Eighty-four percent of employers with capital accumulation plans offer plans that contain a 401(k) arrangement, and 91% of all employers with capital accumulation plans contain provisions for tax deferral — either a 401(k) option, 403(b) tax deferred annuity or a section 457 salary deferral. ■

Capital accumulation plan options

Investment option	Average percent of plan assets invested	Percent of plans offering the option
Guaranteed investment contracts	60	73
Company stock	36	40
Other investments*	26	24
Balanced fund	24	30
Money market fund	23	45
Diversified fund	21	42
Aggressive equity fund	17	41
Bond fund	13	34
Real estate fund	7	3

*Often are indexed funds

Source: The Wyatt Co., Washington

The consultants directory will be published in the Nov. 12 issue.

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Firm consolidates assets

Monarch Capital Corp. moves operations to subsidiary

By Marlene Givant Star

SAN FRANCISCO — Monarch Capital Corp. has folded its $1.3 billion investment operations into its Associated Capital Investors Inc. money management subsidiary, replacing Thomas B. Kelley as president and chief investment officer of Associated.

Monarch, Springfield, Mass., has transferred $1.3 billion in assets under management and the entire investment staff of its headquarters to San Francisco-based Associated, consolidating $4.3 billion in assets under one roof, of which about half is managed for tax-exempt clients.

George Siguler, the vice chairman and chief investment officer of Monarch, has been named president and chief investment officer for Associated, replacing Mr. Kelley who will leave at the end of the year. Mr. Kelley has not yet disclosed his plans.

Monarch, a variable life and disability income insurance company, has a controlling interest in Associated, which runs $3.2 billion. Associated's $200 million in high yield bond portfolios will continue to be managed out of the firm's Little Rock, Ark., office.

"High yield has had an extraordinary record. That will stay just where it is," said Mr. Siguler.

Mr. Siguler, a founding partner of the Harvard Management Co. and a manager of Harvard University's endowment from 1973 to 1983, was chief of staff for the U.S. Department of Health and Human Services for two years before joining Monarch. He engineered Monarch's acquisition of Associated from BankAmerica Corp. in 1988. Since the acquisition, he has had oversight responsibility for the firm.

Other portfolio managers joining Mr. Siguler in the move include Michael J. Romanowski, Douglas A. Barry, John E. Leslie III and Seth A. Reicher.

Mr. Siguler guided Monarch's investment strategy, including managing the company's high-performing bond portfolio, overseeing all private equity investing — an area he emphasized at Harvard — and targeting investments for the company's variable life and annuity products.

Monarch's private investments have posted a compound annualized gain exceeding 37% for the five years ended Dec. 31, 1989. Mr. Siguler plans to market Monarch's expertise in the area to institutional investors.

"We want to bring some investment opportunities in Monarch's general account to the institutional community," he said. Investments will include leveraged buy-outs, start-ups of financial service companies; high-technology deals; and recapitalizations.

After spending the summer at the San Francisco office of Associated, Mr. Siguler determined "people on the West Coast were doing some things better than us with more scale."

Mr. Siguler said the consolidation won't save much in the way of costs, but will place professionals in a better location. "San Francisco is more of a mainstream investment community than Springfield," he said.

Quantitative risk control and identification techniques developed in Springfield will fit in well with the investment strategies used in San Francisco, he added.

According to a statement from Monarch, Mr. Kelley is "considering several ventures but is not ready to discuss specific plans."

Clients took the change in stride.

Sue Lewandowski, a portfolio manager with the $4.2 billion plan of Chrysler Corp., Highland Park, Mich., which has a $70 million equity account with Associated, said: "We don't think (the changes) will affect our relationship with them at all."

Performance in the three years the firm has been with Chrysler has been "what we expected," she added. ■

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Liability

Continued from page 3

as high as 22⅞ in the past year.

In 1991, however, Pru-Bache ana lysts expect Bethlehem to see im provements. The Sparrows Poin overhaul, while costly, is significan the analysts said. This and improve ments at other plants will giv Bethlehem a solid, low-cost produc line to meet demand in the earl 1990s, they said. Sparrows Poin represents 35% of Bethlehem's steel making capability.

Bethlehem's $3.3 billion pensio fund, largely internally managed, i run conservatively, with about two thirds of the assets allocated to fixe income and one-third to equitie The company is pleased with thi allocation and has no plans t change, Mr. Millenbruch said.

The fund hasn't made majo changes in actuarial assumption but made a slight one at the en of 1989, lowering the discount rat used to value liabilities to 9% fron 9.5%. Liabilities weren't affecte significantly, Mr. Millenbruch said.

As Bethlehem pared its wor force in the early and middle 1980 early retirements made liabilitie swell, but that has slowed, he sai Bethlehem has about 30,000 activ employees and 69,000 retirees.

Placement

Continued from page 3

same period in 1989. IDD said neither the passage of Rule 144A nor the gap left in corporate financings by the virtual disappearance of the junk bond market could boost the sagging private placement market this year.

Investment banks were lead agents on the three largest deals of the first half: Gibralter Real Estate's $940.2 million in debt underwritten by Lehman Brothers, New York; Smithkline Beecham Americas' $800 million of Dutch auction preferred stock underwritten by Lehman and Goldman, Sachs; and Shearson Lehman Brothers Holdings' $750 million convertible preferred underwritten by its Lehman Brothers division.

Among the leading commercial bank agents of overall private deals, J.P. Morgan rose to third place with $5.2 billion in volume from fourth place in the year-earlier period. Citicorp maintained its sixth place rank with $3.5 billion and Chase Manhattan, the other commercial bank in the top 10, rose to 10th from 11th place with $2.1 billion.

In plain-vanilla debt, commercial banks swept the bottom half of the top 10 with Continental Bank; Citicorp; First National Bank of Chicago; and Bank of America, San Francisco, ranking seventh through 10th.

Thaddeus Beczak, managing director of J.P. Morgan, said the firm's volume of private placements nearly would have doubled to $10 billion if foreign deals were included in the IDD figures. "We view the business as a global business. We probably do as much business internationally as we do domestically, and that wasn't reflected in the figures," he said.

For J.P. Morgan, the biggest growth areas in private placements are highly structured complicated transactions and weak-investment-grade transactions and equity placements.

Among its structured transactions in the first half, J.P. Morgan was agent on several employee stock ownership plan debt refinancings using grantor trust structures. Clients included American Telephone & Telegraph Co. and Exxon Corp.

The firm also placed the $180 million Canaan Capital fund, believed to be the largest pool of venture capital money raised this year, and was agent on a number of Latin American deals, including $150 million in unsecured notes for Telefonos de Mexico, the Mexican telephone company, and a telephone receivables transaction for Embratel, the Brazilian telephone company.

Tim Conway, head of private placements for Citicorp Global Finance, New York, said the bank recently completed its first transaction under the Securities and Exchange Commission's Rule 144A for Nova Corp., an oil and gas company in Alberta, Canada.

"Canada has been a very active market for us and it will continue to be," he said, adding the Nova deal played into the bank's cross-border capabilities.

"It stood out because it was broadly distributed and sold to traditional and non-traditional buyers of private placements," he said.

Citicorp also is emphasizing other natural resources industries and utility and service industry deals.

The bank's top ranking in non-investment-grade deals was due to several large transactions in the first half, including a $270 million senior notes offering for Uniroyal Chemical Co., Middlebury, Conn.

Joel Glasky, managing director and head of the private placement group at Chase, said more acquisitions are being financed in the private market because the public high-yield market has dried up and small to midsized companies continued to depend on the private market for longer-term financing. Chase is well positione in both areas, he said.

The bank also benefits from cli ent relationships in certain indus tries such as energy, financial ser vices and media.

"We're experts in a lot of differ ent industry specialties. That ex pertise can be brought to bear o a private placement more conven iently and with more effectivenes within a commercial bank (tha an investment bank). The peopl who make the loans study energ and media industries. They kno the companies and issues that im pact them extremely well which i very helpful in private place ments," said Mr. Glasky.

Among investment banks Goldman, Sachs continues as th leading agent in private place ments. Although Goldman's fin ancings fell to $8.1 billion fron $11.9 billion, the firm maintaine its commanding 15% share of th market. Salomon Brothers wa second.

Private placement underwriter rankings*
(Jan. 1 - June 30)

	1990		1989	
Manager	$ amount	Issues	$ amount	Issues
Goldman, Sachs	8,140.4	116	1,940.2	133
Salomon Brothers	5,609.8	76	4,219.2	41
J.P. Morgan	5,213.7	65	7,215.4	69
Lehman Brothers	4,754.5	79	4,503.6	54
Merrill Lynch Capital Markets	3,595.3	46	3,553.0	60
Citicorp	3,529.3	31	4,619.6	51
First Boston	2,854.0	33	7,682.6	86
Morgan Stanley	2,752.8	21	2,950.6	44
PaineWebber	2,408.6	51	2,409.6	46
Chase Manhattan	2,105.0	54	2,846.8	53
Bankers Trust	1,798.7	43	5,244.5	102
First Nat'l Bank of Chicago	1,705.6	67	1,218.9	52
Chemical Bank	1,630.8	47	1,930.5	63
Bank of America	1,201.0	32	2,482.0	58
Continental Bank	1,158.0	25	-	-
Dillon, Read	816.9	15	-	-
Dean Witter Capital Markets	652.6	33	327.0	23
Manufacturers Hanover	640.6	15	1,247.6	15
Smith Barney, Harris Upham	640.2	17	1,183.5	29
Kendall Capital Partners	546.0	3	-	-

Dollar amount in millions
* Proportional credit to each manager; excludes CDs and deposit notes
Source: IDD Information Services

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Pe &Investments

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AT DEADLINE

Monks resigns from ISS

Corporate governance leader Robert Monks, president of Institutional Shareholder Services, resigned to set up a shareholder advocacy firm, Institutional Shareholder Partners.

Nell Minow, ISS general counsel, has been named president of ISS, an institutional shareholder consulting firm.

Toy retailer may issue notes

Prudential Capital Corp. has designed an unusual $200 million private placement facility for Toys "R" Us. The retailer gets fast, easy access to medium-term, fixed- and floating-rate financing at market rates and a new base of potential investors.

The company may issue up to $200 million in medium-term notes any time in the next three years. Prudential would retain much of the debt. The balance would be sold through Prudential Asset Sales & Syndications.

Roley, Nichols acquired

Landerbank North America has agreed to acquire a majority interest in Roley, Nichols Capital Group Inc., the holding company for RNC Capital Management Co.

Landerbank North America is a subsidiary of Osterreichische Landerbank Aktiengesellschaft, Vienna's second largest bank. The acquisition will help both Landerbank and RNC create a global money management network, officials said. The transaction is expected to be completed in the fourth quarter; he price was not released.

unds buy building

A limited partnership made up f the pension funds for meritech, Hughes Aircraft and extron recently paid $38 million or the Madison Square Building, 20-story office building in anhattan's Midtown South area.

Schroder Real Estate Associates nade the purchase on behalf of he partnership. The seller, erisford Properties Ltd., New ork, was represented by Julien J. tudley Inc.

anagers, custodian added

- The $53 million Wilmington (Del.) Pension System has hired hree local managers, terminated ne and reduced another's ccount.

Compu-Val Investments will nanage $2.5 million in equities; Marvin & Palmer Associates, $6.5 nillion in equities; and Cypress apital Management, about $7.5 nillion in fixed income.

An account with the Vilmington office of Loomis, ayles was terminated and a ixed-income account managed by Delaware Trust of Wilmington was reduced.

- The $287 million Grinnell College endowment fund hired Northern Trust as master custodian, said David Clay, treasurer.

Northern replaces Bankers Trust Co., Des Moines.

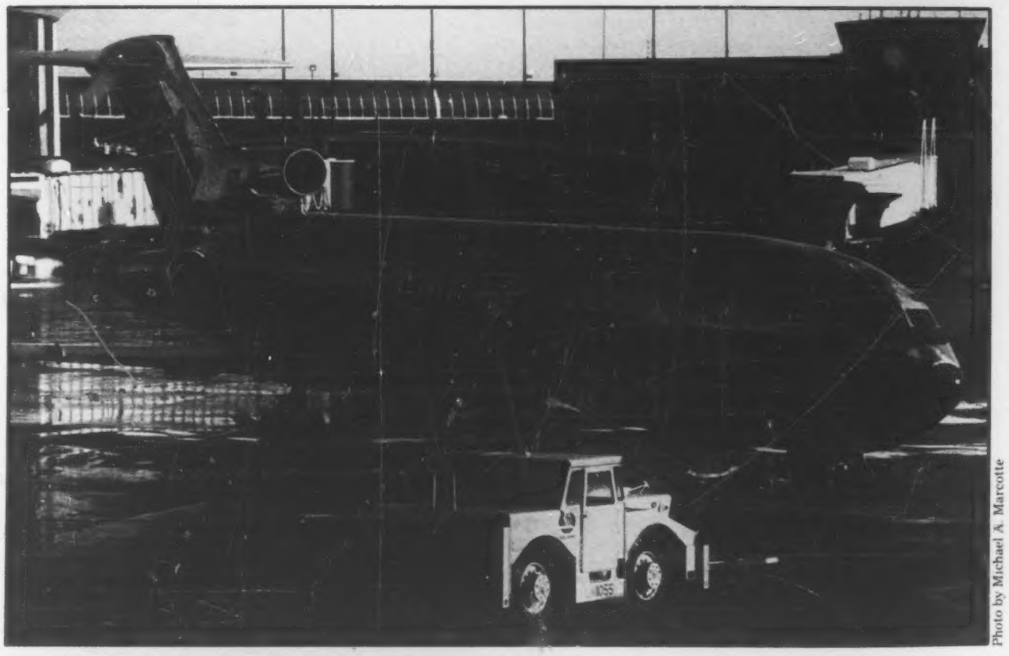

Photo by Michael A. Marcotte

The PBGC's experiences with Eastern Airlines' pension plans partly are responsible for the agency's quest for bankruptcy and pension law reform.

Deficit-fighters eye funds

Hikes in PBGC fees and reversion tax get serious look

By Joel Chernoff

WASHINGTON — Employers might shell out more dollars to the Pension Benefit Guaranty Corp as a result of the budget-deficit package now being negotiated.

Meanwhile, a deal permitting transfers of surplus pension assets to retiree medical accounts and restricting asset reversions from terminated pension plans is in the works, and benefits experts believe it will be included in a final budget package.

In addition, whether or not asset reversions are hampered, some experts believe an increase in the excise tax imposed on reversions is inevitable. And a proposed securities transfer tax has not been included, in the face of heavy opposition by the securities industry.

"There definitely will be something on reversions and the excise tax," said Frank McArdle, manager of Hewitt Associates' Washington office.

Budget negotiators struggled last week to piece together a five-year, $500 billion deficit-reduction bill to avoid federal worker furloughs and other cutbacks from taking effect under the Gramm-Rudman-Hollings law Oct. 1.

But it appeared a compromise would emerge shortly, resulting in a package of spending cuts and tax hikes being assembled by mid-October. Legislators also would have to delay the effective date of Gramm-Rudman cuts and approve a continuing resolution to permit federal operations to continue.

Negotiators on the deficit-reduction package tentatively have agreed to a $65 million annual increase in revenue from the PBGC, which insures defined benefit pension plans, sources said.

James A. Lockhart III, the PBGC's executive director, said if a premium hike is included in the package, the agency would want most of the burden to be absorbed by companies with underfunded pension plans. There now

See **Deficit** *on page 63*

Bondholders get some respect

By Marcia Parker

Corporate executives and boards of directors are being urged to change how they deal with company bondholders and their views of their limited obligations to them.

If these ideas take hold, the impact will be far reaching, putting equity and debtholders on a more equal footing and inevitably leading to conflicts over their often clashing interests.

Bankers, lawyers and others who advise companies have warned executives to examine their future debt obligations and open a dialogue with bondholders in case the company falters and they find themselves face to face at the bargaining table during a restructuring.

There are other reasons to change the way companies deal with debtholders. Growing bondholder activism, especially in workouts; the emergence of the "debt raider;" concerns about the still ailing junk bond market; and fear of recession and inflation should convince corporate executives it's time to stop treating bondholders like second-class citizens.

The need for a new era in bondholder relations was the focus of a conference in mid-September designed to alert corporate executives to the vulnerabilities posed by their debt obligations and to explore the strategic options available to them. It was sponsored by Fried, Frank, Harris, Shriver & Jacobson, a leading New York law firm, and Georgeson & Co. Inc., a big proxy solicitation and investor relations adviser in New York. Both firms provide advice to companies and bondholders.

Companies often have hundreds of bondholders, including dozens of banks. "Often companies don't know who owns their paper," said Wilbur Ross, senior managing director at Rothschild, Inc., a New York advisory firm.

See **Respect** *on page 61*

Benefits to cost GM $1.4 billion

By Trudy Ring

DETROIT — General Motors Corp.'s new contract with the United Auto Workers will cost the company $1.46 billion for enhanced pension benefits, the union says.

Other contract provisions, however, will allow GM to operate more efficiently, so there will be a trade-off for the increased pensions, auto industry analysts say.

The contract likely will set the pattern for the U.S. auto industry, but Ford Motor Co., Dearborn, might prefer a different benefits agreement, while Chrysler Corp., Highland Park, might find the pension provisions a handicap, according to analysts.

GM and UAW negotiators tentatively agreed to the three-year contract in mid-September; UAW members were to finish voting on it by Sept. 30.

A newsletter circulated by the UAW to its members put the cost of the pension enhancements at $1.46 billion. "That sounds like the right order of magnitude" for the life of the contract, said Gerry Bell, partner and actuary with Kwasha Lipton, Fort Lee, N.J., a firm with no connection to GM or the UAW.

Both GM and the UAW declined comment on the matter, as did the actuarial firms they use — The Wyatt Co. for GM and Martin E. Segal Co. for the UAW.

Mr. Bell said the figure sounds right because of the increases in both current service cost and past service liability that GM appears likely to incur. He added, however, it's hard to be precise about how the $1.46 billion will be divided among these costs.

The contract features pension improvements for both future and current retirees. For future retirees, the "30-and-out" pension — an early retirement supplement for persons who retire before age 62 with 30 or more years of service — will go to $1,800 from $1,500 a month during the three-year life of the contract.

Basic pension benefit rates also will be raised for both current and future retirees. For persons who retire on or after Oct. 1, basic benefits will be increased $4.45 a month per year of credited service over the life of the contract. For those who had retired previously, the rate will increase anywhere from $1.25 to $4.10 a month per year of credited service, with the increase varying according to when they retired and what their basic benefit rate was before.

It's unlikely GM would change its rate of return assumption or investment strategy significantly on account of the new contract, Mr. Bell said. In the past, some companies tried to pay for benefit

See **UAW contract** *on page 61*

NEWS DIGEST

Gold may be precious to some, but institutional investors generally don't include the shiny metal in their investment portfolios. Page 51.

SPECIAL REPORT: MASTER TRUST/GLOBAL CUSTODY

The largest banks captured an even greater portion of master trust and custody assets in the past year, as global custody accounts fueled business growth. Also, pension officials seem satisfied with the fees charged. Page 25.

FINANCING

Oryx Energy's stock offering hinges on the acceptance of the company's debt load. Page 3.

INTERNATIONAL

British pension funds continue to lower their exposure to fixed-income and realty investments. Page 52.

REAL ESTATE

Trammell Crow's plan to transfer properties to TIAA-CREF in lieu of loan payments has sparked a suit. Page 2.

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Something old, something new

One survey is winding down while another is just under way. This is the final call for responses to *Pensions & Investments'* annual investment management consultants directory; the deadline is Oct. 14. The questionnaires for the profiles of the largest pension funds, however, were mailed Oct. 1 to more than 1,400 pension executives; that deadline is Nov. 11. If you have any questions regarding either directory, call Christine Philip, directory coordinator, at (312) 649-5217.

Trade costs escape notice

Most executives unaware of how commissions are used

By Joel Chernoff

Pension executives' scrutiny of their trading costs is only skin deep.

Despite admonitions by the Department of Labor that pension executives monitor their trading costs, a new survey by the Callan Investments Institute, San Francisco, reveals the executives do little probing of how brokerage commissions are used.

Nearly 80% of pension executives don't know or haven't asked their money managers how they use commissions, the survey showed, and more than half don't have a formal soft-dollar policy.

The survey results come at a time of increased pressure from some quarters for more information about the use of commissions and soft dollars.

"I think this is going to be an explosive issue," said Dexter Earle, partner, Goldman, Sachs & Co., New York. Goldman and Morgan Stanley & Co., New York, urged Labor Secretary Elizabeth H. Dole earlier this year to take a tougher line on soft-dollar trades.

In addition, the Securities and Exchange Commission has promised to review the overall soft-dollar questions, including the impact on market liquidity and volatility, later this year. The SEC might push for greater disclosure by investment managers.

According to the survey, while only 21% of money managers provide clients with a breakdown of how they spend commissions, many said they would provide a breakdown on request. Few pension executives, however, appear to take advantage of this offer.

Callan also found only 44% of pension executives — and 51% of money managers — have a formal soft-dollar allocation policy.

Even then, the difficulties inherent in measuring transaction costs — especially elusive market-impact costs — cause executives to paper over the issue.

"Most of the soft-dollar policies are just a superficial statement to satisfy government regulators," said Ken Brunke, senior vice president of Callan Associates Inc. and executive director of the Callan Investments Institute, Chicago.

Trading experts believe trading cost issues are just beginning to heat up.

"Why aren't people more concerned about these issues?" asked Laszlo Birinyi Jr., president of Birinyi Associates Inc., New York. Commissions have a significant impact on manager performance but are considered of secondary importance, he said.

Meanwhile, the survey of 304 pension executives and 163 money managers found brokerage directed by pension executives still is on the rise. The survey was conducted in December 1989 but released recently.

More than 56% of the pension executives surveyed direct bro-

See **Commissions** *on page 63*

Suit seeks to halt transfer

Crow tries swap of realty for debt

By Terry Williams

MINNEAPOLIS — A former Trammell Crow Co. executive is suing several company executives to stop the transfer of a building to the Teachers Insurance and Annuity Association — College Retirement Equities Fund.

Kirtland C. Woodhouse, a former managing director of Trammell Crow's Minnesota operation, said he is trying to block the company's plans to deed a suburban Minneapolis office building to TIAA-CREF as settlement for a mortgage on which the developer defaulted.

The suit was filed Aug. 20 in Hennepin County Court, Fourth Judicial District, Minneapolis.

Named as defendants in the lawsuit are Harlan R. Crow, son of the company founder, and James McDonald Williams and Joel C. Peterson, managing partners.

Mr. Woodhouse alleges if 8400 Normandale is deeded to the pension fund, he will lose his almost $1.5 million equity stake in the office building, which is owned by Normandale Lake Office Center Limited Partnership, a Trammell Crow partnership of which Mr. Weedhouse is a partner.

In all, Trammell Crow wants the partnership to deed four office buildings and sell another one at a discount to TIAA-CREF in exchange for forgiveness of loans on which the developer defaulted, Mr. Woodhouse alleges.

Trammell Crow is willing to deed over these buildings to preserve lending commitments on other projects from TIAA-CREF as well as its relationship with the giant pension fund, he contends in the suit.

Mr. Woodhouse's suit alleged TIAA-CREF indicated it would stop all pending loan commitments with Trammell Crow if the fund didn't receive the 8400 Normandale property and it was forced to foreclose on three other properties.

The suit maintains Mr. Woodhouse "has no interest in these (pending) projects and stands to gain nothing by trading his equity in the 8400 Normandale property for (the fund's) continued goodwill toward the Crow organization.

See **Transfer** *on page 62*

Early retirement options likely

By Hillary Durgin

WASHINGTON — Early retirement incentive programs will survive under anti-age discrimination legislation passed by the Senate last week.

The revised Senate bill, which affects how employers design their benefit programs for older workers, will not give employers carte blanche in developing those plans, but will grant them far more freedom than earlier versions of the bill.

The bill, S. 1511, now moves to the House for consideration. The House is expected to review the legislation this week.

Early retirement options cut personnel costs for employers and are a key to an early exit for workers.

"Unless (the plans) are a subterfuge to get rid of older employees, we think they'll be 'consistent with the relevant purpose of the act,' and that is to allow employees to retire with a choice," said John F. Woyke, principal with TPF&C, Valhalla, N.Y., referring to the wording adopted by the Senate.

After more than a year of debate over legislation that Democrats argued was vital to prevent discrimination against older workers, but which Republicans charged would compound benefits costs, the Senate Sept. 24 approved a fifth version of the legislation, by a vote of 94 to 1.

Sen. Orrin Hatch is one of the sponsors of the anti-age discrimination bill.

The bill, the Older Workers' Benefit Protection Act, was offered as a substitute to a more restrictive version approved last March by the Senate Labor and Human Resources Committee. The substitute measure was offered by Sens. David Pryor, D-Ark.; Orrin G. Hatch, R-Utah; Howard M. Metzenbaum, D-Ohio; John Heinz, R-Pa.; and Jim Jeffords, R-Vt.

With time running short until Congress adjourns for the year, House members face considerable pressure to vote on the legislation this week. Despite lingering concerns among employer and older workers' groups over provisions of the Senate compromise, the House is expected to accept the

See **Retire** *on page 62*

GE Investments

Worldwide Diversified Money Management Services

Henkel goes abroad

Foreign foray part of diversification plan

By Lori Miller

GULPH MILLS, Pa. — The $125 million pension fund of Henkel Corp., the U.S. chemical company affiliate of Henkel KGaA of Germany, is making its first venture into the international arena.

Henkel hired two managers to invest 12% of the pension fund's assets in international equities. G.T. Capital Management, San Francisco, and Murray Johnstone International Ltd., Chicago, were hired to manage $7.5 million each, said James Ripka, treasurer.

Henkel also hired three domestic fixed-income managers: MacKay-Shields Financial Corp., New York, and Consistent Asset Management Co., Chadds Ford, Pa., will manage $10 million each; and Philadelphia-based Right Time Econometrics, will manage $500,000, according to Mr. Ripka. Right Time, a small, quantitative manager, was hired as a test.

Mr. Ripka said Henkel decided to invest internationally to achieve diversification and higher returns.

The company, which has grown largely by acquisition since 1960, recently acquired several chemical companies, and their pension fund assets were combined with Henkel's assets.

Henkel decided last year to invest internationally, but had to postpone the move until assets became available.

The move to international investing will affect only Henkel's equity allocation. Before hiring the new managers, the fund had 58% of its assets invested in domestic equities, 30% in fixed income, 6% in real estate and 6% in cash. The new asset mix is 46% in U.S. stocks and 12% in international equities; the others are unchanged.

The five new managers are being funded through maturing guaranteed investment contracts and the termination of a manager Mr. Ripka declined to identify.

Rich Gleason, vice president, consulting services division at Shearson Lehman Brothers Inc., the pension fund's consultant, said Henkel's decision to move away from GICs will allow company executives "to know exactly what their underlying securities are" and will give them "better control over the credit quality of their portfolio." ■

CORRECTIONS & CLARIFICATIONS

- A caption in the Sept. 3 issue misidentified executives of **International Risk Control Inc.**, Redwood City, Calif. Pictured in the photo above are, from left, Scott Silver, Jerome Behar and Joshua Sommer.
- A photo caption in the Sept. 17 issue should have said **Rep. Henry B. Gonzalez** opposes federal pass-through insurance protection for pension assets deposited in banks.
- In the Sept. 17 issue a chart ranking private placement agents was misidentified. The correct heading is, **Leading Agents/Advisers of Private Placements**.

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FINANCING

Latin American entrepreneurs keep faith with backers

■ While many Latin American governments are struggling to make interest payments — never mind principal repayments — on their loans from foreign banks, entrepreneurs in those countries are proving themselves worthy credit risks.

ACCION International's Bridge Fund — through which endowments, foundations, churches and individual investors are financing struggling local entrepreneurs in Latin America — boasts a repayment rate of 98%.

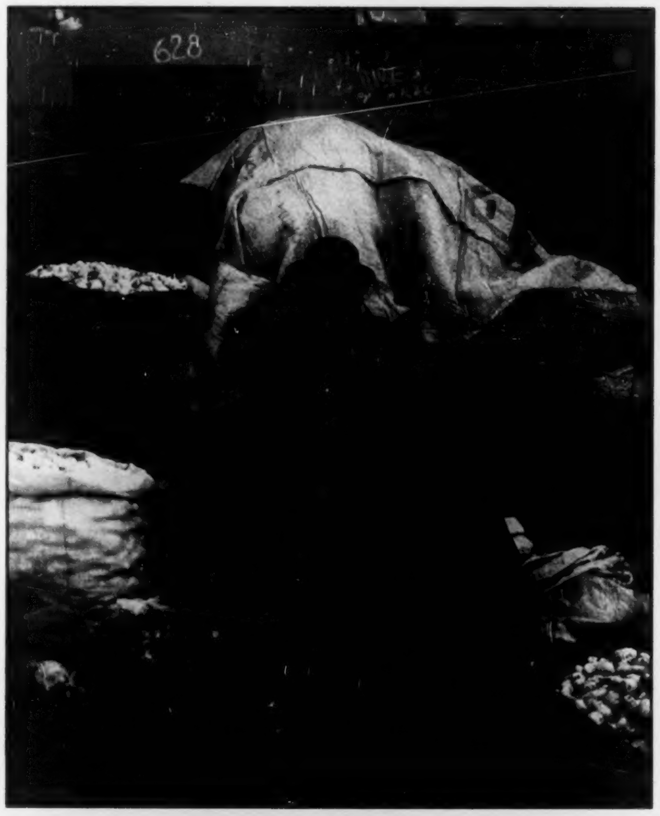
Investments in the fund have just reached more than $2 million.

"Since the Bridge Fund was founded in 1984, there has not been a single default. The self-employed poor in Latin America are paying back their loans at a rate far superior to their nations' governments and private banks," ACCION International, a private non-profit organization based in Cambridge, Mass., said in a statement.

U.S. investors have purchased certificates of deposit underwritten by Chemical Bank, New York, and South Shore Bank, Chicago, through ACCION that then are used as guarantees for banks in Latin America to lend to the smallest-scale entrepreneurs in low-income communities.

Why take a chance on financing the down and out?

"Our investors are people who have sort of struggled themselves," said Deborah Drake, director of capital formation.



Latin American entrepreneurs are proving good credit risks to the investors who funded them through ACCION.

PRIVATIZATION

Investors, governments may 'marry'

■ Privatization might become the next hot investment area.

State and local governments need cash to rebuild their ailing infrastructures while Eastern European countries hunger for outside capital to reconstruct their sagging economies.

U.S. infrastructure needs alone are expected to cost between $1 trillion and $3 trillion during the next 20 years, while the total U.S. public works budget for 1989 was only $95 million, said John Stainback, president and chief executive officer of Privatization International Inc., a new advisory firm.

The firm wants to marry governmental financing needs with institutional investors' sizable assets, Mr. Stainback said.

The Washington-based firm hopes to aid governments spin off public services and operations in a variety of public-private partnerships: helping to sell off state-owned enterprises, developing real estate, rebuilding the nation's infrastructure and providing public services, such as waste collection.

Therein lies a great opportunity for institutional investors, who can take advantage of inefficiencies in the market, he said. His firm plans to develop a family of funds to invest in privatization opportunities. Public pension funds, already pressured to promote local development, could be natural investors.

Deals would be structured much like leveraged buy-outs, with several tiers of financing.

Privatization International has been named adviser to the U.S. Military Academy at West Point, N.Y., on restructuring its real estate assets to help finance a $500 million building project. West Point, which owns raw land along the Hudson River, is $300 million short of its financing needs.

The firm also is negotiating with the County of Albany, N.Y., for the lease/acquisition of the 18,500-seat, $76 million Knickerbocker Arena.

ENDOWMENTS

Maryland college retains manager

■ The $50 million University of Maryland System Endowment Fund has renewed its contract with Alex. Brown Investment Management, Baltimore, to manage a $37 million active equity portfolio, said David M. Forman, a university accountant.

The search was prompted by the expiration of Alex. Brown's five-year renewable contract. The endowment has had a similar contract with its fixed-income manager, T. Rowe Price Associates, Baltimore, and that $13 million contract is under review.

PEOPLE

Professional flips over research

■ What do martial arts and quantitative investment research have in common?

Just ask Michael Even, senior vice president and director of quantitative research at Independence Investment Associates Inc., Boston, and a black belt in Tae-Kwon-Do. Mr. Even was profiled in the firm's monthly newsletter "Independent Thought" as the firm's "Karate Kid."

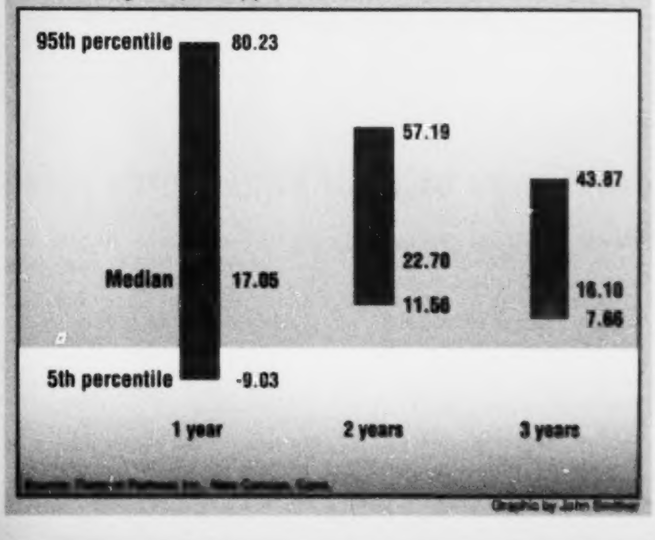
"I like combining theory and philosophy in practical applications. At Independence that means translating new investment ideas into products for our clients. It's like Tae-Kwon-Do, where we connect an ancient philosophy with practical self-defense and exercise," Mr. Even said in the profile.

It remains to be seen what Independence's research gains from the Cornell University graduate's other avocations — bicycle touring, windsurfing and snow skiing.

Tremont universe of limited partnerships

(Periods ended June 30)

Returns for periods greater than one year are annualized. Investment returns are gross (before) performance fees.



Source: Tremont Partners Inc., New Canaan, Conn.

Graphic by John [illegible]

THE COURTS

Judge is tough on fund trustees

■ U.S. District Court Judge Thomas E. Scott used some harsh words in relieving trustees of their investment duties for the Pompano Beach, Fla.-based Operating Engineers Local 675 pension and welfare funds.

In his Aug. 28 order, the judge found "the funds' investment policies are inappropriate, inadequately diversified and lack the requisite security which the funds must achieve."

The pension fund is 95% invested in real estate and lacks cash to pay out benefits, according to Labor Department allegations. Assets from the welfare fund were used to pay retirement benefits, the government also charged (*Pensions & Investments*, Aug. 6).

In appointing a receiver to handle the real estate investments and a special independent counsel to oversee the funds' administration, the judge ordered the trustees and other persons from "transferring, selling, assigning, dissipating, concealing, offsetting, seizing, withdrawing, encumbering, hypothecating, mortgaging, pledging, impairing, converting, wasting or otherwise disposing of, in any manner whether tangible or intangible, the assets of the pension fund and the welfare fund."

The judge further ordered trustees and others from "altering, destroying, concealing or otherwise disposing of, in any manner, directly or indirectly, any financial, business, or personal records, or any other document concerning or relating to the pension fund and the welfare fund or their assets."

Is that clear?

Additions to Bassett Center mall are on hold, but the lender — Teacher Retirement System of Texas — has been patient so far.

REAL ESTATE

Texas Teachers keeps a cool head

■ Washington real estate investor Conrad Cafritz's financial troubles so far have not hurt The Teacher Retirement System of Texas, which is owed $55.3 million by the Cafritz-Schonberger Group.

Last year, the $24 billion Texas Teachers fund provided a $59 million participating mortgage on Bassett Center, a regional mall in El Paso, Texas, purchased by the developer (*Pensions & Investments*, Dec. 12).

While cash flows still are solid from the mall investment, which is about 85% to 90% leased, Mr. Cafritz's financial problems will hamper his ability to make capital improvements, said Joe Perrone, chief investment officer.

Cafritz-Schonberger planned to make sizable additions to the mall. But now, Mr. Cafritz, who has liabilities of $1.1 billion and assets worth $754.5 million, reportedly is struggling to avoid a bankruptcy filing and is seeking permission from his lenders to sell or refinance his holdings by the end of 1993.

The question is whether Mr. Cafritz's lenders will be patient. Mr. Perrone, who noted Mr. Cafritz has been very candid about his money problems, said, "I've met the man. I think very highly of him."

VENTURE CAPITAL

Fund will focus on 'underserved' Southeast U.S.

■ A new venture capital fund will focus on the Southeast, an area the partners say is underserved by venture capital.

The fund, Cooper Davidson Investment Fund I L.P., Atlanta, is seeking to raise at least $20 million. To date, it has drawn commitments totaling $8 million from pension funds and wealthy individuals. James W. Davidson, executive officer of the fund, declined to identify the investors.

Mr. Davidson plans to leave his post as vice president of Goldman, Sachs & Co., New York, to devote full time to the fund. For Goldman, Sachs, he has worked with many clients in the Southeast, he said. The fund's other executive officer is Frederick E. Cooper, a lawyer with Jones, Day, Reavis and Pogue, Atlanta, and former president of Flowers Industries Inc., Thomasville, Ga. Mr. Cooper will cut back to part time at the law firm. The fund will have offices in Atlanta and Miami.

Despite the economic growth in the Southeast in the past few years, venture capital investment in the region has been limited, Messrs. Davidson and Cooper said.

Therefore, they plan to make a large portion of their investments there. They will seek companies in various stages of development and in various industries.

The fund will close later this year, Mr. Davidson said.

MONEY MANAGEMENT

UAM continues its buying binge; 2 more enter fold

■ United Asset Management Corp. has acquired Newbold's Asset Management Inc., Bryn Mawr, Pa., and Cambiar Investors Inc., Englewood, Colo.

With the acquisitions, UAM now owns 24 investment management firms that manage about $41 billion. Newbold's runs about $4.4 billion, largely tax exempt, and Cambiar manages about $400 million, of which 80% is tax exempt.

UAM paid about $40.4 million for Newbold's, an industry source said. No estimate of the price of Cambiar was available, but the source said money management firms tend to sell for between 1% and 2% of assets under management, with equity managers toward the higher end of the range.

Newbold's is an active equity and balanced manager. Its equity approach emphasizes low price-earnings ratios, while its fixed-income approach is passive. Cambiar, an active equity manager, focuses on growth and low price-earnings stocks.

As with other firms acquired by UAM, each will maintain its own investment philosophy and autonomy in operations, UAM officials said. Newbold's was a subsidiary of Provident Mutual Life Insurance Co., Philadelphia, and will continue as investment adviser to several Provident Mutual accounts. Cambiar was owned by its principals.

FINANCING

Recession would cast a wide net

■ Non-financial corporations — particularly in non-durable goods and trade sectors — would have a tough time coping with their debt burdens in a recession, a Merrill Lynch Capital Markets report concludes.

Corporate cash flow has fallen sharply after peaking in the fourth quarter of 1988, while net interest payments have continued to increase.

As a result, the debt servicing capacity of corporate borrowers deteriorated sharply in 1989, according to a report by Robert Schwartz, Merrill's senior financial economist.

Until then, a healthy increase in cash flow during the economic expansion of the decade had enabled non-financial corporations to meet their explosive 70% increase in interest payments since the end of 1982.

"Whether or not the economy is on the verge of a recession, corporate profits are already at recession levels and balance sheets are under considerably more distress than they were just prior to past postwar recessions," the report said.

"Corporations had less cash flow to cover interest payments in 1989 than during any of the four recessionary periods since 1960," the report said.

Interest burden by major industry in recessions

(non-financial corporations)

Industry	1960-'61	1969-'70	1973-'75	1980-'82	Net interest payments 1989 ($ bils.)
Manufacturing	2.1	14.5	14.8	16.6	$38.4
durable goods	2.3	17.5	18.5	21.7	8.1
non-durable goods	1.9	11.6	11.7	13.5	30.2
Trans. & utilities	21.2	29.9	34.9	37.0	40.8
transportation	16.5	22.0	21.2	20.1	5.0
communication	15.9	25.3	28.3	27.3	10.7
elec. & gas	27.7	40.4	50.7	54.3	25.1
Wholesale trade	7.8	14.0	13.7	23.9	7.3
Retail trade	4.2	18.5	23.0	27.4	11.9
Mining	0.0	10.1	13.1	42.8	2.5
Construction	5.2	5.3	15.9	9.5	2.0
Total*	7.5	18.5	20.8	23.9	102.8

Source Merrill Lynch Capital Markets, New York

* Excluding services and agriculture

Global custody leads pack

Larger banks are biggest winners domestically

By Trudy Ring

Global custody continued to be the growth area for master trust and master custody banks in the past year, while concentration of domestic assets among the largest banks became greater.

Global custody assets held for tax-exempt U.S. institutions grew 7.1%, to about $111.2 billion from about $103.9 billion, in the 12 months ended June 30. These figures represent both assets held directly and those held through third-party global networks.

Domestic master trust and master custody assets, in contrast, grew just 5.6%, to $1.9 trillion to from $1.8 trillion.

Global custody growth is attributable to the increased international commitment by institutional investors; those investing overseas must have a global custodian.

"Clients who have existing investments internationally have increased them," said Jay Carty, senior vice president and director of marketing at Boston Safe Deposit and Trust Co. One client, the $56 billion California Public Employees' Retirement System, alone added $3.1 billion in international investments in the past 12 months.

Also, there still are pension funds and other institutions making overseas investments for the first time.

Global custody growth is likely to continue, said Jennifer Kamp Cameron, vice president of The Northern Trust Co., Chicago. Some institutions have put their international investment plans on hold because of the Mideast crisis, but they are not in the majority, she said.

Offering global custody capabilities can give a bank an edge in attracting domestic master trust and master custody business, she added.

In global custody, however, there is a different selection of providers; some firms, like Morgan Stanley Trust Co. and Brown Brothers Harriman & Co., are players in global custody but not domestic master trust and custody.

On the domestic side, business is becoming more concentrated among the top banks. Among the 10 largest banks, domestic master trust and master custody assets grew 8.7%. Among the five largest, assets grew 18%. The top three providers of master trust/custody services were the same ones that filled those slots last year — State Street Bank and Trust Co., Bankers Trust Co. and Northern Trust. Northern Trust had the most new business for the year, with $25.6 billion.

Master trust profiles 28
Global custody profiles 40

Boston Safe moved into the fourth slot from sixth, while Chase Manhattan dropped to fifth from fourth. Mellon Bank moved up to sixth from seventh, while Bank of New York dropped to seventh from fourth, due largely to fallout from its takeover of Irving Trust Co. (*see related story on this page*). Citibank remained eighth; Security Pacific Bank moved up to ninth from 11th and Harris Trust and Savings Bank to 10th from 12th. Manufacturers Hanover Trust Co., with a 59% drop in assets, fell to 16th from ninth. A Manufacturers Hanover official, however, said last year's number likely included taxable assets.

The concentration among the largest banks came about in the past few years, as many institutions have moved their master trust or custodial relationship to one of the major providers from a regional bank.

Many middle-market pension funds may had long-standing relationships with regional banks but found they could not get the same type of master trust services, said David Willour, group managing vice president at Chase Manhattan Bank, New York. This factor also opens opportunities for the top-tier banks to provide private-label services for the regionals, he said.

Generally, when a bank gets new master trust or master custody business, it's taking the business away from someone else, said Tim Keaney, vice president-sales and marketing at Mellon Bank, Pittsburgh. "A commonly used statistic says that seven out of eight master trust competitions are takeaway competitions," he said.

With the increased concentration, banks need to distinguish themselves by offering services beyond the basics, said Carter Reynolds, senior vice president of Bankers Trust, New York. These include a wide range of cash management alternatives, performance measurement and analytical services, she said.

Prior business relationships, such as in commercial banking or investment management, also help banks attract master trust and custodial clients, Mr. Carty added.

Overall, the intense competition among the top-tier banks is advantageous for fund sponsors, making it a buyer's market, Mr. Keaney said.

While global custody remains more of a growth area than domestic master trust and custody, it likely will become more of a buyer's market in the near future, because of enhanced competition, Mr. Willour added.

According to *Pensions & Investments*' master trust survey, master trust assets grew more than master custody in the 12 months ended June 30, in contrast to the past few years. Master trust

See **Custody** *on page 47*

Master trust/custody banks ranked by U.S. tax-exempt assets
U.S. $ mils.

Firm	Total	Master trust	Master custody
State Street	286,635	135,208	151,427
Bankers Trust	241,600	181,000	60,600
Northern Trust	201,602	110,664	90,938
Boston Safe Deposit	152,278	54,161	98,117
Chase Manhattan	148,400	71,900	76,500
Mellon Bank	140,219	123,056	17,163
Bank of New York	122,605	56,128	66,477
Citibank	92,314	32,118	60,196
Security Pacific	70,000	20,000	50,000
Harris Trust	52,026	49,248	2,778
CoreStates Bank	41,736	4,638	37,098
First Wachovia	38,099	30,432	7,667
Citizens & Southern Trust	35,300	20,600	14,700
NBD	35,145	12,904	22,241
Chemical Bank	28,754	3,833	24,921
Manufacturers Hanover	27,700	25,500	2,200
Mfg. Nat'l Detroit	23,449	18,884	4,565
United States Trust	20,900	15,500	5,400
Continental Bank	19,838	14,176	5,662
Wilmington Trust	19,427	19,094	333
Boatmen's Trust	18,482	2,177	16,305
Bank of America	18,100	2,100	16,000
Ameritrust	13,833	4,788	9,045
First Interstate/California	12,000	5,000	7,000
LaSalle Nat'l Trust	8,557	1,054	7,503
First Trust	5,727	5,128	599
Norwest Bank Minnesota	4,500	3,300	1,200
Bank of Boston	4,445	1,845	2,600
First Wisconsin	4,035	2,106	1,929
Marshall & Ilsley Trust	3,600	1,700	1,900
Trust Co. Bank	3,063	1,518	1,545
Marine Midland	3,000	2,000	1,000
Security Trust	2,948	969	1,979
Connecticut Bank & Trust	2,161	1,600	561
Bank of Oklahoma	1,938	1,938	—
First Nat'l/Chicago	1,695	739	956
Comerica	1,375	—	1,375
Hibernia Trust	1,335	287	1,048
Bank IV	892	659	233
BayBanks	714	228	486
Crestar Financial	164	93	71
First Interstate/Wash.	120	120	—
Total	**1,910,711**	**1,038,393**	**872,318**

Survey finds execs satisfied with fees

By Fred Williams

Pension fund executives gave Manufacturers National Bank of Detroit the highest rating in overall customer satisfaction for master trustee banks in *Pensions and Investments*' biennial master trust survey.

The biennial survey of 1,200 plan sponsors also found master trust fees are not viewed as excessive; more than three out of four plan sponsors (76.4%) said their trust fees are average. Only 5.2% said they believe their trustee fees are high.

Pension executives were asked to rate their master trust banks on a scale of 1 (poor) to 5 (excellent) in several categories: personnel, reporting capabilities, systems capability, service orientation, online capabilities and overall satisfaction.

Manufacturers National received a 4.5 in overall satisfaction, and placed highest in the personnel (4.75) and "other services" (4.5) subcategories.

Behind Manufacturers National in overall satisfaction were Mellon Bank, Pittsburgh, with 4.33 and U.S. Trust, New York, with 4.25. Mellon Bank was the top master trustee in the 1988 survey.

Mellon, however, ranked No. 1 in overall satisfaction in the global custody area. The bank also ranked tops in all of the global subcategories — settlement, dividend and interest posting, foreign exchange, country coverage, tax reclamation, accuracy of reporting and overall performance satisfaction.

While Manufacturers National and Mellon were rated highest, neither received the top rating of 5 and no bank received a perfect rating in any of the subcategories.

Mellon received a perfect 5 rating overall in the 1988 survey of master trustees.

The Northern Trust Co., Chicago, followed Mellon in the overall satisfaction category for global custodians with a 3.7, while Chase Manhattan Bank, New York, received a 3.6.

The survey indicated 16% of plan sponsors pay trustee fees at the corporate level while the vast majority, 84%, pay trustee fees at the plan level.

In the master trust personnel category, Continental Bank, Chicago, and U.S. Trust, New York, both followed Manufacturers National Detroit with a 4.5. Mellon

See **Survey** *on page 47*

Sponsors' global custodian satisfaction*

	Rating	No. of responses
Mellon Bank**	4.1	10
Northern Trust	3.7	22
Chase	3.6	12
Bankers Trust	3.4	14
Mitsubishi	3.4	5
NBD	3.3	3
State Street	3.3	16
Boston Safe	3.0	8
Harris Trust	3.0	3

* includes global custodians with three or more responses
** includes reponses for Mellon Pictet

Overall ranking of master trust banks by pension fund sponsors*

	Rating	No. of responses
Man. Nat'l/Detroit	4.5	4
Mellon Bank	4.33	21
U.S. Trust	4.25	4
Boston Safe	4.16	19
Northern Trust	4.12	49
NBD	4.1	10
Bankers Trust	4.06	35
First Wachovia	4	10
NCNB	4	7
State Street	3.97	31
Citibank	3.83	6
Continental	3.83	6
Bank of N.Y.	3.75	16
Harris Trust	3.71	17
Mercantile Safe	3.67	3
Chase	3.62	21
Security Pacific	3	5

* does not include banks with fewer than three responses

Different outcomes

Client response varies in trust mergers

By Margaret Price

A look at two separate bank mergers illustrates the nature of pension funds as master trust and custody clients.

In one — the unfriendly takeover of Irving Trust Co. by Bank of New York in 1989 — some master trust and custody clients uncomfortable with the fight defected, mostly right after the merger. In the other — the late 1988 merger of Boatmen's National Bank of St. Louis and Centerre Trust Co. — customers remained unruffled.

Officials of both surviving banks (Bank of New York and Boatmen's) now claim the mergers produced the expected advantages: economies of scale, bigger size, streamlined and enhanced operations and expanded market bases leading to higher revenue.

They also stress any dust has settled. In Boatmen's case, it apparently has. But for Bank of New York, the acquisition of Irving Trust presented thornier problems, and the master trust/global custody areas were not spared.

Bank of New York's master trust assets for tax-exempt clients dropped almost 36%, to $56.1 billion this year from $87.5 billion last year; master custody assets increased to $66.5 billion from $58.8 billion.

Because of the merger, Bank of New York's master trust/master custody operation "lost momentum . . . from the perspective of the buying public," said Thomas Abraham, a partner with Andersen Consulting, New York. He cited two key problems — loss of some staff to major competitors and a perception that the sales effort "went into a state of limbo," causing a loss of visibility as officials focused on working out the merger.

Pensions & Investments' survey of customer satisfaction with master trust services showed Bank of New York received average to below-average marks (*see related story at left*). Still, pension fund clients interviewed for this story were more laudatory.

"We are very happy with Bank of New York," said William Parmentier, assistant treasurer and investment manager at Grumman Corp., Bethpage, N.Y. The bank is master trustee for Grumman's $2.2 billion in pension assets, and handles accounting and record keeping. As a customer of Bank of New York's prior to the merger, Mr. Parmentier said, he had been

See **Mergers** *on page 45*

U.S. facing a challenge

Recommended changes update trade settlement process

By Dennis M. Earle

In 1988, the Group of Thirty initiated a project to improve the state of risk, efficiency and cost in the world's clearance and settlement systems.

Given the impact of the October 1987 market break on post-trade areas of the financial industry, the group focused on those practices that increased the risks involved with "money meeting securities" in settling trades.

The group, an independent, non-partisan, non-profit organization, published a list of nine recommendations, and committees in each country have been set up to oversee the adoption of these recommendations.

The U.S. market system basically is in compliance with the majority of these recommendations. Two of the recommendations, however, (that trades settle on trade day plus three, and that settlement be made in same-day funds) have been examined by the U.S. Working Committee. That panel was established to study the impact that adopting these two recommendations would have on the U.S. systems.

Inherent in the Group of Thirty's recommendations is a powerful competitive challenge. Settling trades earlier than T plus five will result in fewer trades "in the pipeline," thereby reducing overall risk to the system. Today, markets like Japan's already settle trades in less than three days.

As more countries move toward compliance with the G30 recommendation, the United States will be faced with the possibility of not being on the leading edge of safety and efficiency in its settlement of trades unless it, too, moves toward earlier settlement.

The U.S. Working Committee is recommending all corporate equity and debt trades, as well as municipal securities trades, be settled on T plus three in 1992. Available data indicate, for street-side trades, this poses little, if any, change. The use of depositories is sufficiently widespread that the vast majority of securities are in hand on T plus three for trades among intermediaries, as well as for those between intermediaries and institutions.

In support of these changes as they affect institutional clients, the committee envisions the Depository Trust Co.'s ID System would change from its curr batch mode to an interactive o

On the retail side, data on "s transactions also seem to indic most securities are in hand b plus three. On the "buy" side retail customers, the majority monies are in house as good fu by T plus three, but, to collect residual, which now arrives check on T plus four or later, require some behavior modifi tion. This offers the industry opportunity to rethink how we teract with retail customers to look at T plus three settlem not just as a shortening of the s tlement period by two days, also as a new process.

The committee further reco mends trades be settled only book entry between financial termediaries, and between int mediaries and institutional c tomers, by 1992. The signific amount of immobilization that ready exists indicates this is r dily achievable.

For retail customers, the co mittee is extremely sensitive the unique retail participation U.S. markets, as well as the r tradition surrounding the p session of physical certificat The committee believes that today's competitive world, cost savings associated w book-entry-only settlement m be realized. The committee the fore recommends book-entry s tlement for retail customers achieved in 1995 using a dir registration-type alternative the use of physical certificates.

With significant advantages the industry in terms of cost, issuers in terms of knowing th customers and to the retail inv tors in terms of perceived se rity, implementation of a dir registration-type system may celerate the trend by retail c tomers to leave their securit with third parties.

The committee does not beli the current retail trend tow leaving securities with a financ intermediary will result in elimination of the use of physi certificates in the foreseeable ture, unless an alternative (su as direct registration) is offered

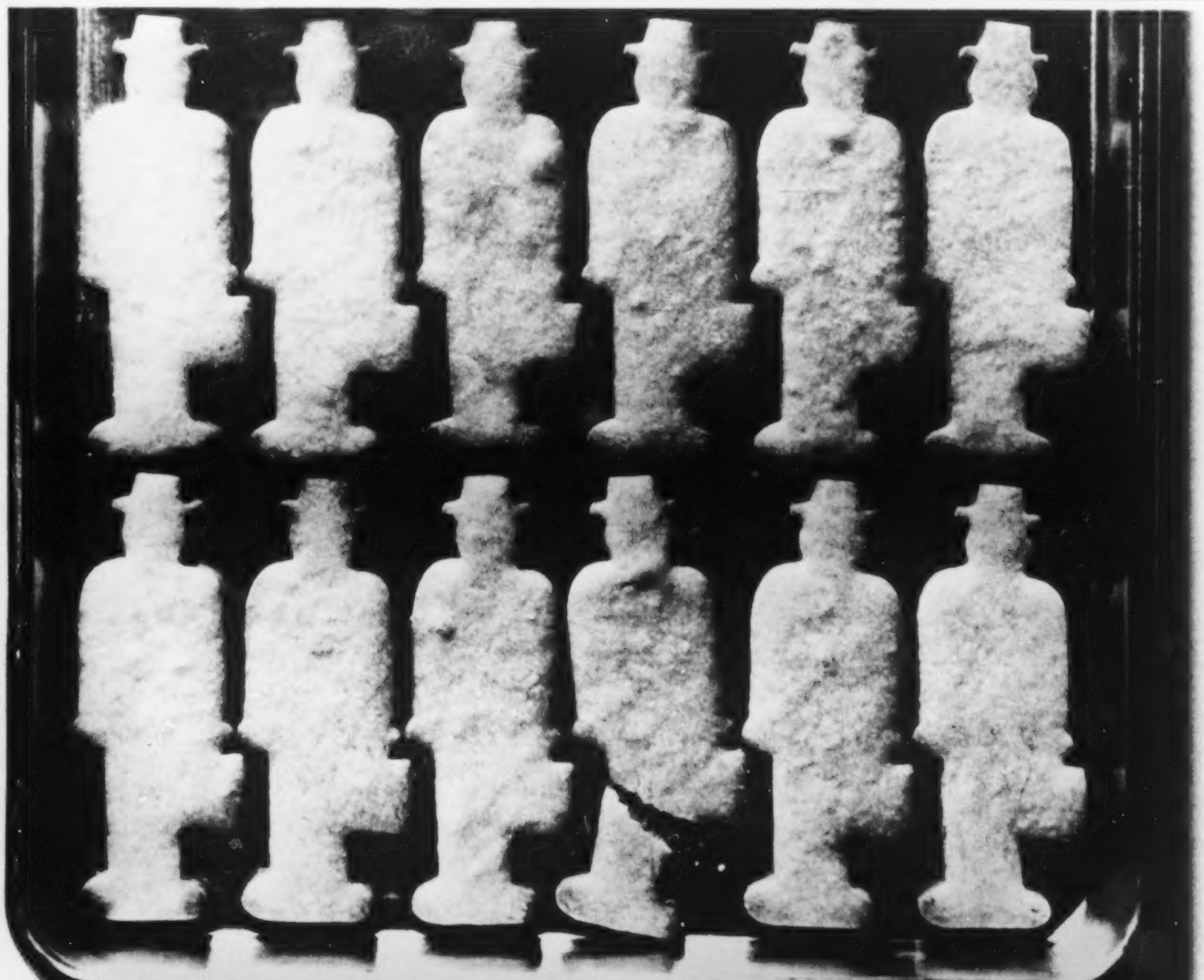
The committee also reco mends settlement between fina cial intermediaries, and betw financial intermediaries and stitutional customers, be acco plished using same-day funds 1992. Same-day funds are th that have finality of payment the same day the notice of tra fer is sent to the recipient. An ample in the United States is Fe wire, which is operated by Federal Reserve System.

Of greater concern to the co mittee is how retail paymen would be made. Given the curre state of retail payment syste both in terms of availability well as user friendliness, the co mittee is unable to recomme that retail payments be effected same-day funds. Available da indicate a growing retail custom preference to leave funds on posit at intermediaries.

The committee believes th having intermediaries and ins tutional customers settle in sam day funds while retail custom pay in next-day, or later, funds achievable and will reduce over financial system risk.

The committee has continued involve a growing number of ma ket participants in its evaluati of the T-plus-three settlement a same-day funds recommend tions. In addition, a questionna is available to any firm wishing participate to this evaluation pr cess. The committee expects present its final recommendatio to the Securities and Exchan Commission in late November.

Mr. Earle is executive director of the U.S. Working Committee of the Group of Thirty Clearance and Settlement Project.



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Ameritrust Co. N.A.

900 Euclid Ave., Cleveland, Ohio
44101-0937; (216) 737-4089

Domestic master trust assets	$4,788,000,000
Tax-exempt	$4,788,000,000
Domestic master custodial	$9,045,000,000
Tax-exempt	$9,045,000,000
Domestic master trust clients	64
Domestic master custodial clients	22
Account supervisors	7
Reports available on-line	
Monthly transaction	
Asset & liability	

Ameritrust Co. N.A. reported new, tax-exempt domestic master trust business of $237 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $3.9 billion.

In addition to account administration in Ohio, Ameritrust offers administration and service in Texas and Indiana; all operations and reporting originates in Cleveland.

The primary accounting method is settlement date accounting. Trade-date reporting is offered.

Services offered in the basic master trust/master custodial agreement are securities lending, performance measurement, benefit payments, cash management, global custody and performance analytics.

Customized reports and an on-line inquiry system are available for additional fees.

Record-keeping services include 401(k), profit-sharing, ESOPs and thrift savings plans.

New features include global securities lending.

Fees are based on market value at quarter end and transactions for the quarter.

Gary W. Queen is client contact.

Bank of America

1 S. Van Ness, Second Floor, San
Francisco, Calif. 94103; (415)
241-7567

Domestic master trust assets	$2,100,000,000
Tax-exempt	$2,100,000,000
Domestic master custodial	$83,000,000,000
Tax-exempt	$16,000,000,000
Taxable	$67,000,000,000
Domestic master trust clients	3
Domestic master custodial clients	
Tax-exempt	350
Taxable	550
Account supervisors	40
Reports available on-line	
Monthly transaction	

Bank of America reported new, tax-exempt domestic master custody assets of $150 million in the year ended June 30.

The primary accounting method is average cost. FIFO, LIFO and trade date, accrual and unitized accounting are offered.

Services offered in the basic trust/custodial agreement are custody of assets, settlement, capital change services, collection and crediting of income, automatic cash sweeps, benefit disbursements and investment in the bank's collective funds.

Investment management, participant record keeping and performance measurement are available for additional fees.

Record-keeping services offered include participant record keeping.

New features include electronic reporting capabilities and an electronic instruction system through which clients can transmit trade instructions directly from their PCs.

Fees for domestic services are based on a standard fee schedule, composed of both transactions and safekeeping charges. Account size, asset mix and the level of trading activity are considered in fee negotiations.

W.L. Metzger is the master trust client contact; Robert Darmanin is client contact for master trust.

Bank of Boston

Securities Division, P.O. Box 1882,
MS-45-01-11, Boston, Mass. 02105;
(617) 575-2151

Domestic master trust assets	$1,845,000,000
Tax-exempt	$1,845,000,000
Domestic master custodial	$2,600,000,000
Tax-exempt	$2,600,000,000
Domestic master trust clients	27
Domestic master custodial clients	9
Account supervisors	6
Reports available on-line	
Monthly transaction	
Asset & liability	

Bank of Boston reported new, tax-exempt domestic master trust business of $102 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $1 million.

The primary accounting method is trade date. Settlement date and cash basis accounting, as well as six tax lot accounting methods for asset dispositions, are offered.

Services offered in the basic master trust/master custodial agreement are safekeeping and settlement, income collection, corporate action processing, cash management and accounting and reporting.

Global custody, benefit disbursements, securities lending, on-line access, plan accounting and endowment donor accounting services are available for additional fees.

New features include the Boston Window, a single access point for all electronic delivery products and information services.

Fees are based on market value, transactions and portfolio charges.

Daniel T. Notartomaso is the client contact.

Bank IV

P.O. Box 4, 100 N. Broadway, Wichita,
Kan. 67201-0004; (316) 261-4555

Domestic master trust assets	$659,000,000
Tax-exempt	$659,000,000
Domestic master custodial	$4,714,000,000
Tax-exempt	$233,000,000
Taxable	$4,481,000,000
Domestic master trust clients	124
Domestic master custodial clients	
Tax-exempt	29
Taxable	24
Account supervisors	9
Reports available on-line	
Monthly transaction	
Asset & liability	

Bank IV's primary accounting method is trade date with accruals. Trade date without accruals, settlement date with accruals, and settlement date without accruals are offered.

Services offered in the basic master trust/master custodial agreement are safekeeping, cash sweeping, individually designed statements and trusteeship.

Performance analysis and on-line access are available for additional fees.

Record-keeping services offered include special custodial services for assets of insurers.

New features include an in-house liquidity fund for cash sweeping.

Fees are based on the number and type of securities, the number of transactions and the dollar value of assets.

Roger A. Ramseyer is the client contact.

Bank of New York

1 Wall St., New York, N.Y. 10286;
(212) 495-1785

Domestic master trust assets	$78,251,000,000
Tax-exempt	$56,128,000,000
Taxable	$22,123,000,000
Domestic master custodial	$69,549,000,000
Tax-exempt	$66,477,000,000
Taxable	$3,072,000,000
Domestic master trust clients	
Tax-exempt	184
Taxable	9
Domestic master custodial clients	
Tax-exempt	74
Taxable	13
Account supervisors	46
Reports available on-line	
Monthly transaction	
Asset & liability	
Performance measurement	

Bank of New York reported new, tax-exempt domestic master trust business of $722 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $2 billion.

The primary accounting methods are trade and settlement date. Average cost, tax lot basis, amortized cost and liability accounting are offered.

Services offered in the basic master trust/master custodial agreement are global safekeeping, full trust administration, STIF funds, zero balance sweeps, portfolio plan accounting, on-line services, ERISA reporting and client training.

Benefit payments, worldwide securities lending and trade settlement, multicurrency accounting, performance measurement and analytics, consulting services and specialized STIF funds are available for additional fees.

Record-keeping services offered include monthly, quarterly and annual portfolio accounting, on-line on-line transaction and position reports, and multicurrency performance reporting.

New features include enhanced investment manager modeling and strategic tracking, and local PC management workstations.

Fees are negotiated individually, based on market asset value, transactions, portfolio structure and services required.

John Ehrmann is the master trust client contact. William Barren is the master custody client contact.

Bank of Oklahoma N.A.

P.O. Box 2300, Tulsa, Okla. 74192;
(918) 588-6437

Domestic master trust assets	$2,598,000,000
Tax-exempt	$1,938,000,000
Taxable	$660,000,000
Domestic master trust clients	
Tax-exempt	97
Taxable	1
Account supervisors	7
Reports available on-line	
Monthly transaction	
Asset & liability	
Performance measurement	

Bank of Oklahoma N.A. reported new, tax-exempt domestic master trust business of $10 million in the year ended June 30.

The primary accounting method is contractual settlement date, full accrual. Trade date and cash basis accounting are offered.

Services offered in the basic master trust/master custodial agreement are auto cash management, on-line access, current pricing, immediate credit of income, performance measurement, and regulatory, broker and accounting reports.

Investment management, distribution services, employee benefit record keeping, ADP & ACP testing and investment decision support services are available for additional fees.

Record-keeping services offered include 401(k), profit-sharing, money purchase, thrift, Keoghs, IRAs, defined benefit, plan administration, master plans, ESOPs and BESOPs.

New features include its investment decision support system.

Fees for domestic services are based on asset market value and/or transaction volume.

The client is Scott A. MacDonald.

Bankers Trust Co.

280 Park Ave., New York, N.Y. 10017;
(212) 850-2089

Domestic master trust assets	$182,000,000,000
Tax-exempt	$181,000,000,000
Taxable	$1,000,000,000
Domestic master custodial	$74,400,000,000
Tax-exempt	$60,600,000,000
Taxable	$13,800,000,000
Domestic master trust clients	
Tax-exempt	366
Taxable	3
Domestic master custodial clients	
Tax-exempt	73
Taxable	27
Account supervisors	185
Reports available on-line	
Monthly transaction	
Asset & liability	
Performance measurement	

Bankers Trust Co. reported new, tax-exempt domestic master trust business of $2.5 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $8.6 billion.

The primary accounting method is fully accrued contractual settlement date, maintaining both trade-date and contractual settlement date positions. Tax lot accounting and inventory recording on an average cost basis are offered.

Services offered in the basic master trust/master custodial agreement are cash management, safekeeping, accounting and reporting, transaction processing, investment manager liaison and regulatory updates.

Domestic and international securities lending, global custody, performance measurement and analytics, on-line access, customized graphics, benefit payments, investment management, actively managed STIF accounts, discount brokerage, consulting, dividend reinvestment, trade execution monitoring and participant record-keeping are available for additional fees.

Other record-keeping services offered include daily valuation and fund transfer service and plan sponsor access through terminals.

New features include Autotrade, an automated trade instruction processing system for sponsors and managers; same-day fund valuation; intra-month performance measurement; and combined global reporting.

Fees for domestic services are negotiated individually.

The master trust client contact is Jessica Wait; the master custody client contact is Robert Betz.

BayBanks

175 Federal St., Boston, Mass. 02110;
(617) 482-1048

Domestic master trust assets	$228,000,000
Tax-exempt	$228,000,000
Domestic master custodial	$486,000,000
Tax-exempt	$486,000,000
Domestic master trust clients	53
Domestic master custodial clients	10
Account supervisors	

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1290 Avenue of the Americas
New York, NY 10104
(212) 408-2900

BayBanks reported new, tax-exempt domestic master trust business of $45 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $73 million.

The primary accounting method is accrual. Cash accounting also is offered.

Services offered in the basic master trust/master custodial agreement are custody, capital actions, income collection and trade settlement. Pension payment processing is available for an additional fee.

Record-keeping services offered include participant accounting, 401(k) and profit-sharing plans.

Fees are based on the market value of the assets.

The master trust client contact is Anthony Solomita; the master custody client contact is Eugene J. Durgin.

Boatmen's Trust Co.

100 N. Broadway, St. Louis, Mo.
63178-4737; (314) 466-3800

Domestic master trust assets	$2,177,000,000
Tax-exempt	$2,177,000,000
Domestic master custodial	$16,305,000,000
Tax-exempt	$16,305,000,000
Domestic master trust clients	13
Domestic master custodial clients	58
Account supervisors	22

Reports available on-line:
- Monthly transaction
- Asset & liability
- Performance measurement

Boatmen's Trust Co. reported new, tax-exem domestic master trust business of $303 million the year ended June 30 and new, tax-exempt d mestic master custodial business of $1.291 billion.

The primary accounting method is fully accru trade date. Settlement date accounting is offered.

Services offered in the basic master trust/mast custodial agreement are administration, custod trade settlement, income collections, daily pricin tax lot accounting and automated cash sweeps.

Global custody, securities lending, on-line a counting, performance measurement, cash ma agement, pooled funds and standard portfolio benefit payments and participant record keepir are available for additional fees.

Record-keeping services offered include real e tate custody and equitable share accounting.

New features include on-line access to equity an fixed-income characteristics, on-line performanc measurement and enhanced STIF.

Fees are based on the number of investme managers, the number and type of transactions an market value of assets.

Richard W. Hibbs is the client contact.

Boston Safe Deposit & Trust

1 Boston Place, Boston, Mass. 02108;
(617) 722-7000

Domestic master trust assets	$54,632,000,00
Tax-exempt	$54,161,000,00
Taxable	$471,000,00
Domestic master custodial	$98,830,000,00
Tax-exempt	$98,117,000,00
Taxable	$713,000,0
Domestic master trust clients:	
Tax-exempt	5
Taxable	
Domestic master custodial clients:	
Tax-exempt	3
Taxable	
Account supervisors	4

Reports available on-line:
- Monthly transaction
- Asset & liability
- Performance measurement

Boston Safe Deposit & Trust Co. reported new tax-exempt domestic master trust business of $1. billion in the year ended June 30 and new, tax-ex empt domestic master custodial business of $85 million.

The primary accounting methods are trade date full accrual and general ledger.

Services offered in the basic master trust/maste custodial agreement are cash management, ac counting/reporting and safekeeping.

Performance measurement and analysis, partici pant record keeping, benefit payments, securities lending, on-line information delivery and global cus tody are available for additional fees.

New features include the Client Reporting Sys tem, an information delivery management system and the Institutional Accounting System, a rea time accounting and reporting system with exten sive domestic and international trade capture and reporting capabilities.

Fees are based on any of four elements: portfoli charges; asset-based charges; transaction charges and ancillary services provided.

John L. Carty is the client contact.

Chase Manhattan Bank N.A.

1211 Sixth Ave., New York, N.Y.
10036; (212) 730-2716

Domestic master trust assets	$71,900,000,00
Tax-exempt	$71,900,000,00
Domestic master custodial	$339,500,000,00
Tax-exempt	$76,500,000,00
Taxable	$263,000,000,00
Domestic master trust clients	11
Domestic master custodial clients:	
Tax-exempt	4
Taxable	19
Account supervisors	3

Reports available on-line:
- Monthly transaction
- Asset & liability

Chase Manhattan Bank N.A. reported new, tax exempt domestic master trust business of $1.57 billion in the year ended June 30 and new, tax-ex empt domestic master custodial business of $1.80 billion.

The primary accounting method is fully accrued trade date, contractual. Cash, settlement date amortized, tax lot and plan accounting are offered.

Services offered in the basic master trust/maste custodial agreement are global safekeeping, trans action processing, income collection, corporate ac tion and proxy notification, legal consulting, ac counting, hard copy and on-line reporting, raw dat download, investment adviser liaison, cash swee to zero, cash management and client systems training.

Securities lending; benefit payments; global cus tody; active and passive investment management performance measurement, peer comparison, asse allocation, plan construction and analytics; consulting; tax lot accounting/reporting; bond amortization accretion; and customized reporting are availabl for additional fees.

Record-keeping services offered include partici pant record keeping, benefit payments reporting and transfer agent.

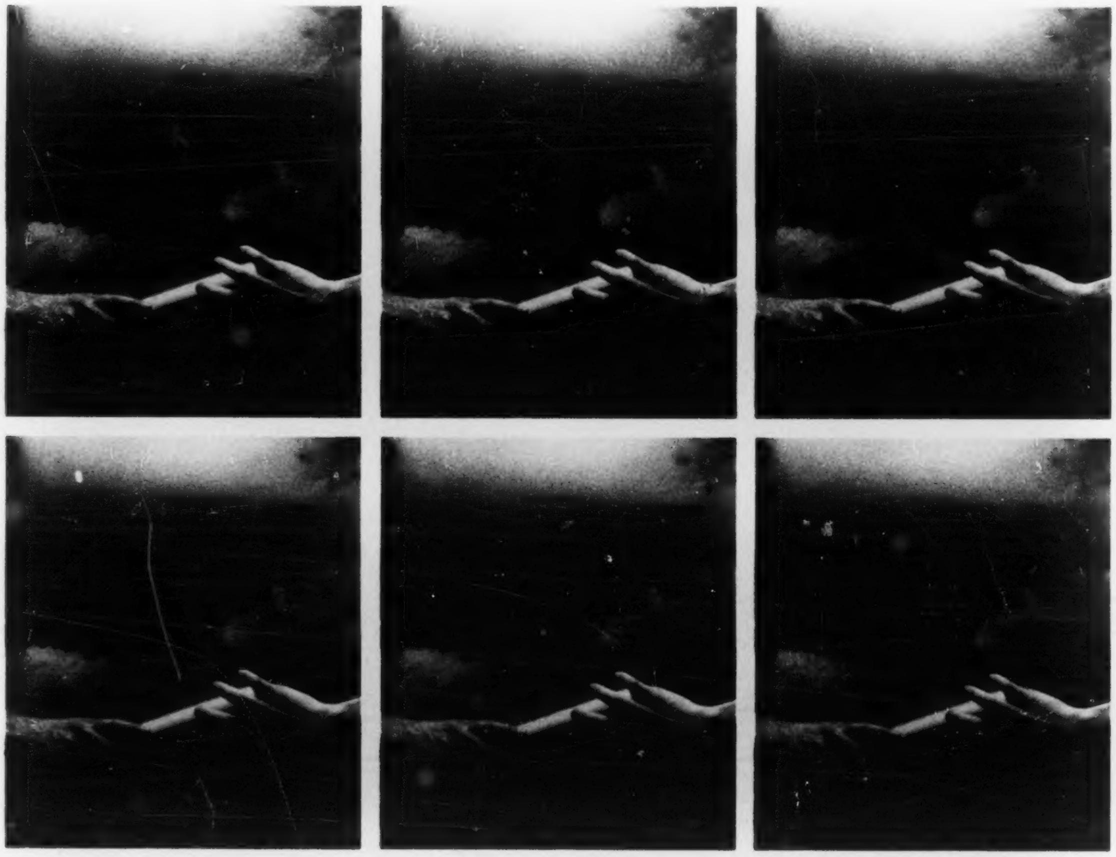
New features include one-stop access to all on line functions; on-line consolidated holdings of U.S and international assets; deutsche mark-denomin ated securities lending; and a report writer, ena bling clients to format reports.

Fees are based on market value, transaction typ and volume, and portfolio type and volume.

David Willour is the client contact.

Consultants directory: Nov. 12.

We Are What We Repeatedly Do. Excellence Then Is Not An Act But A Habit. Aristotle



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Chemical Bank

55 Water St., Third Floor, New York,
N.Y. 10041; (212) 820-3308

Domestic master trust assets	$3,833,000,000
Tax-exempt	$3,833,000,000
Domestic master custodial	$35,926,000,000
Tax-exempt	$24,921,000,000
Taxable	$11,005,000,000
Domestic master trust clients	87
Domestic master custodial clients:	
Tax-exempt	120
Taxable	19
Account supervisors	18
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Chemical Bank reported new, tax-exempt domestic master trust business of $2 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $22.231 billion.

The figures include the master trust and custody assets of its subsidiary, Texas Commerce Bank.

The primary accounting method is full accrual trade date. Cash and settlement date accounting are offered.

Services offered in the basic master trust/master custodial agreement are safekeeping, transaction processing, settlement, income collection, corporate action notification, proxy processing, accounting, reporting services, performance measurement, benefit disbursements (including on-line access), daily sweep of uninvested funds, account administration and investment adviser liaison.

Electronic access, domestic and international securities lending and global custody are available for additional fees.

New features include electronic access enhancements such as integrated information for domestic and global portfolios, daily valuation reporting, corporate action notification and cash forecasting.

Fees are based on a combination of the market value of the portfolios, the specific reporting requirements and relationship complexity.

Cinda Dooley is the client contact.

Citibank N.A.

1 Court Square, 12th Floor, Long
Island City, N.Y. 11120; (718)
248-4347

Domestic master trust assets	$32,151,000,000
Tax-exempt	$32,118,000,000
Taxable	$33,000,000
Domestic master custodial	$82,939,000,000
Tax-exempt	$60,196,000,000
Taxable	$22,743,000,000
Domestic master trust clients:	
Tax-exempt	195
Taxable	8
Domestic master custodial clients:	
Tax-exempt	86
Taxable	24
Account supervisors	55
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Citibank N.A. reported new, tax-exempt domestic master trust business of $330 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $55 million.

The primary accounting method is full accrual, true trade date. Settlement date and cash basis accounting also are offered.

Services offered in the basic master trust/master custodial agreement are safekeeping and custody, cash management, trade date reporting, equitable share accounting and on-line information management.

Flexible reporting (Citicorp Portfolio Analyst), investment performance evaluation, TUCS comparison, global custody, securities lending, participant record keeping and DRIP service are available for additional fees.

Other record-keeping services offered include a voice response system.

New features include on-line pension disbursing.

Fees are based on individual services.

The master trust client contact is Pamela Bigler; the master custody client contact is Gerard Hounhan.

Citizens & Southern Trust

33 North Ave., Suite 550, Atlanta, Ga.
30308; (404) 897-3081

Domestic master trust assets	$20,600,000,000
Tax-exempt	$20,600,000,000
Domestic master custodial	$14,700,000,000
Tax-exempt	$14,700,000,000
Account supervisors	5
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Citizens & Southern Trust Co. Inc.'s primary accounting method is trade date accrual. Settlement date, non-accrual is also offered.

Services offered in the basic master trust/master custodial agreement include financial accounting, transaction settlement and securities custody.

Portfolio evaluation, participant record keeping, ERISA disclosure, investment management and benefit disbursement are available for additional fees.

New features include a new reporting system.

Fees for domestic services are based on a percentage of assets plus transaction fees.

J. Dan Davis is the client contact.

Comerica Inc.

211 W. Fort St., Detroit, Mich.
48275-1035; (313) 222-5056

Domestic master custodial	$1,375,000,000
Tax-exempt	$1,375,000,000
Domestic master custodial clients	3
Account supervisors	2
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Comerica Inc.'s primary accounting method is contractual settlement date.

Services offered in the basic master trust/master custodial agreement are customized reporting capability, on-site terminals and on-line services.

Performance measurement and securities lending are available for additional fees.

The bank also offers defined contribution and participant record keeping.

New features include performance measurement.

Fees are based on assets held and the number of transactions.

Robert J. Kay is the client contact.

Connecticut Bank & Trust

1 Constitution Plaza, Hartford, Conn.
06115; (203) 244-4876

Domestic master trust assets	$1,600,000,000
Tax-exempt	$1,300,000,000
Domestic master custodial	$561,000,000
Tax-exempt	$561,000,000
Domestic master trust clients	27
Domestic master custodial clients	14
Account supervisors	12

Connecticut Bank & Trust Co. reported new, tax-exempt domestic master trust business of $10 million in the year ended June 30.

The primary accounting method is settlement date accounting with accrual for income and adjustments for pending trades.

Services offered in the basic master trust/master custodial agreement are custody and a full reporting package, including master accountings; monthly, quarterly and annual accounting; investment reviews; and transaction statements.

Participant record keeping, disbursement, investment and performance measurement are available for additional fees.

Other record-keeping services offered include participant statements and reporting, valuations, discrimination testing, loan processing and employee communications.

Fees are based on assets, activity and services required.

Thomas Fenton is the client contact.

Continental Bank

231 S. LaSalle St., Chicago, Ill. 60697;
(312) 828-3560

Domestic master trust assets	$14,176,000,000
Tax-exempt	$14,176,000,000
Domestic master custodial	$74,028,000,000
Tax-exempt	$5,662,000,000
Taxable	$68,366,000,000
Domestic master trust clients	141
Domestic master custodial clients:	
Tax-exempt	20
Taxable	62
Account supervisors	18
Reports available on-line:	
Monthly transaction	
Asset & liability	

Continental Bank reported new, tax-exempt domestic master trust business of $1.109 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $931 million.

The primary accounting method is fully accrued, trade date. Cash basis and settlement date accounting are offered.

Services offered in the basic master trust/master custodial agreement are trust accounting and reporting, plan accounting, clearance and custody of securities, income collection, automated cash management and on-line access to data.

Domestic and international securities lending; global custody; comparative performance measurement reporting and associated consulting; broker commission and trade execution reporting; benefit payments; self-insurance trust administration; investment management; GIC fund; cash management; and lockbox are available for additional fees.

Other record-keeping services offered include customized reporting.

New features include direct client input for maintenance of the benefits payments data base.

Fees for domestic services are based on market value of assets, transactions and services required.

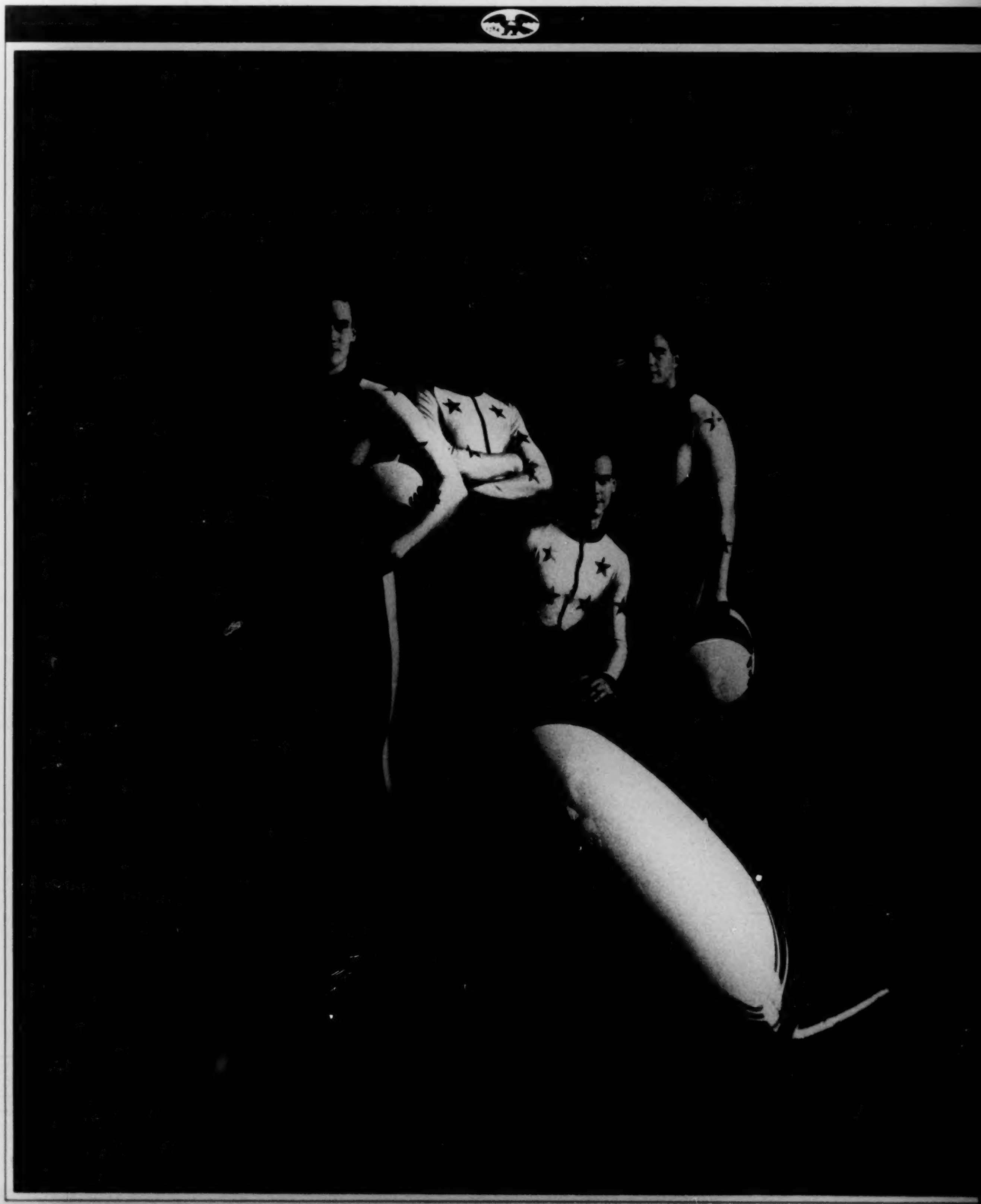
Christopher S. Ross is the client contact.

CoreStates Bank N.A.

P.O. Box 7558, Philadelphia, Pa.
19101-7558; (215) 786-7327

Domestic master trust assets	$4,638,000,000
Tax-exempt	$4,638,000,000
Domestic master custodial	$40,266,000,000
Tax-exempt	$37,098,000,000
Taxable	$3,168,000,000
Domestic master trust clients	26
Domestic master custodial clients:	
Tax-exempt	20
Taxable	10
Account supervisors	20
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

CoreStates Bank N.A. reported new, tax-exempt domestic master trust business of $264 million in the year ended June 30.



CoreStates resulted from the Sept. 30 merger of First Pennsylvania Bank and Philadelphia National Bank. The assets in the profile represent the total assets the banks had as of June 30.

The primary accounting method is settlement date. Accrual trade-date adjusted accounting is also offered.

Services offered in the basic master trust/master stodial agreement are asset administration, cash sis accounting and accrual accounting.

Performance measurement, performance comnson (TUCS), client terminals, securities lending, dex fund management, global custody and equity d fixed-income investment management are ailable for additional fees.

Record-keeping services offered include particint record keeping, pension payroll and proxy votg.

New features include Schedule D reporting for surance companies.

Fees are transaction-based and asset-based.

Allen R. Bradley is the client contact.

restar Financial Corp.

19 E. Main St., Richmond, Va.
23261; (804) 782-5000

omestic master trust assets	$93,000,000
Tax-exempt	$93,000,000
omestic master custodial	$71,000,000
Tax-exempt	$71,000,000
Domestic master trust clients	6
Domestic master custodial clients	1
Account supervisors	3

Crestar Financial Corp.'s primary accounting method is full accrual.

Services offered in the basic master trust/master custodial agreement are custody, trade settlement, income collection, financial statements and cash sweep.

Investment management, participant accounting, pension payroll, benefit disbursement and tax reporting are available for additional fees.

Fees are based on asset value and individual services provided.

Wayne G. Larochelle is the client contact.

First Interstate Bank

707 Wilshire Blvd., W10-S, Los
Angeles, Calif. 90017; (213)
614-3210

Domestic master trust assets	$5,000,000,000
Tax-exempt	$5,000,000,000
Domestic master custodial	$7,525,000,000
Tax-exempt	$7,000,000,000
Taxable	$525,000,000
Domestic master trust clients	27
Domestic master custodial clients:	
Tax-exempt	16
Taxable	7
Account supervisors	15
Reports available on-line:	-
Monthly transaction	
Asset & liability	
Performance measurement	

First Interstate Bank reported new, tax-exempt domestic master trust business of $600 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $14 million.

The primary accounting method is contractual settlement date. Trade date, tax lot and unitized accounting are also offered.

Services offered in the basic master trust/master custodial agreement are settlement, income collection, investment of idle cash and safekeeping.

On-line, real-time access, customized reporting, performance measurement and securities lending are available for additional fees.

New features include daily stock record for security domiciles; ReportMaster, an enhanced, customized reporting system; and trade order entry system.

Fees are based on market value plus transaction fees.

Deborah Dilley is the client contact.

First Interstate Bank of Washington N.A.

P.O. Box 21927, Seattle, Wash.
98111; (206) 292-3522

Domestic master trust assets	$120,000,000
Tax-exempt	$120,000,000
Domestic master trust clients	1
Account supervisors	1

First Interstate Bank of Washington N.A. offers unit accounting asset roll-up reporting in the basic master trust/master custodial agreement.

Fees are asset based.

Lawrence T. Divers is the client contact.

First National Bank of Chicago

1 First National Plaza, Chicago, Ill.
60670; (312) 732-1821

Domestic master trust assets	$754,000,000
Tax-exempt	$739,000,000
Taxable	$15,000,000
Domestic master custodial	$3,938,000,000
Tax-exempt	$956,000,000
Taxable	$2,982,000,000
Domestic master trust clients:	
Tax-exempt	12
Taxable	1
Domestic master custodial clients:	
Tax-exempt	6
Taxable	4
Account supervisors	4
Reports available on-line:	
Monthly transaction	

First National Bank of Chicago reported new, tax-exempt domestic master trust business of $45 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $342 million.

The primary accounting method is cash and settlement date.

Services offered in the basic master trust/master custodial agreement are custody and securities processing, automated cash management, accounting reports, benefit disbursements and performance measurement.

On-line inquiry, plan allocation reports and magnetic media output are available for additional fees.

New features include real-time securities processing, with customer access and input.

Fees are based on a combination of market value, activity and services provided.

The master trust client contact is Thomas J. Gaffigan; the master custody client contact is James V. Cusack.

First Trust National Association

180 E. Fifth St., St. Paul, Minn. 55101;
(612) 223-7000

Domestic master trust assets	$5,128,000,000
Tax-exempt	$5,128,000,000
Domestic master custodial	$1,802,000,000
Tax-exempt	$599,000,000
Taxable	$1,203,000,000
Domestic master trust clients	27
Domestic master custodial clients:	
Tax-exempt	8
Taxable	5
Account supervisors	5
Reports available on-line:	
Monthly transaction	
Asset & liability	

First Trust National Association reported new, tax-exempt domestic master trust business of $265 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $277 million.

The primary accounting method is trade date with full accrual. Settlement date is also offered.

Services offered in the basic master trust/master custodial agreement are custodial services, trade date reporting, investment performance reporting, portfolio review, ERISA disclosure assistance, benefit disbursement and daily cash sweep.

Participant record keeping, individual investment management, GIC fund, global custody, dial-up and securities lending are available for additional fees.

New features include expanded dial-in capabilities.

Fees are calculated using a basis point charge plus transaction charges.

Dave Bodine is the client contact.

First Wachovia Corp.

301 N. Main St., Winston-Salem, N.C.
27150; (919) 770-6348

Domestic master trust assets	$30,432,000,000
Tax-exempt	$30,432,000,000
Domestic master custodial	$11,417,000,000
Tax-exempt	$7,667,000,000
Taxable	$3,750,000,000
Domestic master trust clients	87
Domestic master custodial clients:	
Tax-exempt	37
Taxable	25
Account supervisors	31
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

First Wachovia Corp. reported new, tax-exempt domestic master trust business of $653 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $101 million.

The primary accounting method is full accrual trade-date adjusted. Settlement date accounting is also offered.

Services offered in the basic master trust/master custodial agreement are custody, benefit payments, ERISA reporting, cash management, fail float analysis, monthly reporting, plan accounting, on-line inquiry, legal administrative guidance, administration and daily pricing.

Securities lending, global custody, asset allocation, options and futures processing, participant record keeping, performance measurement, portfolio analysis and comparative performance, customized reporting, trade execution reporting, equity index fund, GIC fund, cash management, proxy voting and monitoring, flexible reporting, timberland fund, charitable unitized accounting, private foundation, and tax preparation and deferred gift administration are available for additional fees.

Record-keeping services offered include participant record keeping for defined contribution plans and fund accounting.

New features include telephone access to participant account balances and a commingled Treasury fund.

Fees are based on market value and transaction charges.

The master trust client contact is Jane B. Fisher; the master custody client contact is David Taylor.

First Wisconsin Trust Co.

777 E. Wisconsin Ave., Milwaukee,
Wis. 53202; (414) 765-4444

Domestic master trust assets	$2,106,000,000
Tax-exempt	$2,106,000,000
Domestic master custodial	$1,929,000,000
Domestic master trust clients	29
Domestic master custodial clients	4
Account supervisors	6
Reports available on-line	
Monthly transaction	
Asset & liability	

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First Wisconsin Trust Co. reported new, tax-exempt domestic master trust business of $193 million in the year ended June 30.

The primary accounting method is fully accrued, trade date adjusted.

Services offered in the basic master trust/master custodial agreement are plan accounting (both dollar and unitized), care and custody of assets, transaction processing, cash management, consolidated and individual investment reviews and securities lending.

On-line access, relative and absolute performance measurement, benefit payments and participant record keeping are available for additional fees.

New features include enhanced relative performance measurement services.

Fees are based on market value of assets and numbers and types of transactions.

Robert J. Aubrecht is the client contact.

Harris Trust & Savings Bank

111 W. Monroe St., Chicago, Ill.
60603; (312) 461-2121

Domestic master trust assets	$49,248,000,000
Tax-exempt	$49,248,000,000
Domestic master custodial	$27,778,000,000
Tax-exempt	$2,778,000,000
Taxable	$25,000,000,000
Domestic master trust clients	77
Domestic master custodial clients:	
Tax-exempt	8
Taxable	100
Account supervisors	10
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Harris Trust & Savings Bank reported new, tax-exempt domestic master trust business of $803 million in the year ended June 30.

The primary accounting method is accrual/trade date. Cash/settlement date accounting also is offered.

Services offered in the basic master trust/master custodial agreement are custody, safekeeping, securities clearance, income collection, cash management, accounting and reporting.

Global custody, benefit disbursements, securities lending (domestic and foreign), performance measurement, universe comparison, portfolio analysis and consulting, participant record keeping, on-line access with data download and graphics, custom cash management, custom reporting and systematic investment management are available for additional fees.

Other record-keeping services offered include custom performance benchmarks.

New features include enhanced reporting, both hard copy and on-line.

Fees are based on market value, transactions and individual services.

The master trust client contact is George H. Walper Jr.; the master custody client contact is Walter J. Kowalczyk.

Hibernia National Bank

P.O. Box 61540, New Orleans, La.
70161; (504) 586-5542

Domestic master trust assets	$287,000,000
Tax-exempt	$287,000,000
Domestic master custodial	$2,017,000,000
Tax-exempt	$1,048,000,000
Taxable	$969,000,000
Domestic master trust clients	13
Domestic master custodial clients:	
Tax-exempt	10
Taxable	1
Account supervisors	9
Reports available on-line:	
Monthly transaction	
Asset & liability	

Hibernia National Bank reported new, tax-exempt domestic master trust business of $5 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $844 million.

The primary accounting method is accrual.

Services offered in the basic master trust/master custodial agreement are tailored to meet individual client needs.

On-line access to account information, benefit payments, participant record keeping and government filings are available for additional fees.

New features include a benefit payment system.

Fees are based on the market value of assets.

William J. Kearney III is the client contact.

International Trust Co.

Royal Bank Plaza, North Tower, P.O.
Box 75, 14th Floor, Toronto, Ontario
M5J 2J2; (416) 865-0515

Canadian master trust assets	$485,000,000
Tax-exempt	$468,000,000
Taxable	$17,000,000
Canadian master custodial	$1,642,000,000
Tax-exempt	$1,642,000,000
Canadian master trust clients:	
Tax-exempt	22
Taxable	2
Canadian master custodial clients	20
Reports available on-line:	
Monthly transaction	
Asset & liability	

International Trust Co. reported new, tax-exempt domestic master trust business of $48 million in the year ended June 30. The firm provides services to Canadian clients. All figures are in U.S. dollars.

The primary accounting method is full accru trust accounting.

Services offered in the basic master trust/mast custodial agreement are custody, settlement, r porting, legislative compliance and pension/lum sum payments.

Performance measurement, specialized reporti and participant record keeping are available for a ditional fees.

New features include automated fee calculation electronic trade feed from Canadian Depository f securities, automatic sweep of cash balances an full multicurrency capabilities.

Fees are asset based, plus activity fees.

Sheldon D. Smaye is the client contact.

LaSalle National Trust N.A.

135 S. LaSalle St., Chicago, Ill. 60603
(312) 443-2300

Domestic master trust assets	$1,054,000,000
Tax-exempt	$1,054,000,000
Domestic master custodial	$7,503,000,000
Tax-exempt	$7,503,000,000
Domestic master trust clients	25
Domestic master custodial clients	322
Account supervisors	11
Reports available on-line:	
Monthly transaction	
Asset & liability	

LaSalle National Trust N.A. reported new, tax-exempt domestic master trust business of $10 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $83 million.

The primary accounting method is cash. Accrual accounting is offered.

Services offered in the basic master trust/master custodial agreement are account statements, cash management, benefits disbursements and securities safekeeping.

Participant record keeping and loan payment are available for additional fees.

Fees are based on a base charge, plus a percentage of assets.

Robert D. Meiresonne is the client contact.

Manufacturers Hanover

270 Park Ave., New York, N.Y. 10017;
(212) 270-2327

Domestic master trust assets	$28,000,000,000
Tax-exempt	$25,500,000,000
Taxable	$2,500,000,000
Domestic master custodial	$42,000,000,000
Tax-exempt	$2,200,000,000
Taxable	$39,800,000,000
Domestic master trust clients:	
Tax-exempt	110
Taxable	15
Domestic master custodial clients:	
Tax-exempt	12
Taxable	1,111
Account supervisors	24
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Manufacturers Hanover reported new, tax-exempt domestic master trust business of $900 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $1.5 billion.

The primary accounting method is trade date. Actual, contractual settlement date accounting also is offered.

Services offered in the basic master trust/master custodial agreement are full administrative services; legal administrative guidance; monthly reports at manager level/plan level and master trust level; zero balance cash management; fail float management; options and futures processing; and ERISA reporting.

Performance measurement, benefit disbursement and related tax reporting, plan accounting, securities lending, TUCS comparisons, asset allocation/asset liability planning, actuarial services, global custody, customized reporting and on-line accounting and reporting are available for additional fees.

Other record-keeping services offered include participant record keeping.

New features include an integrated global securities processing and multicurrency reporting system.

Fees for domestic services are based on a combination of asset value and individual services.

Diane S. Reyes is the client contact.

Manufacturers National Bank of Detroit

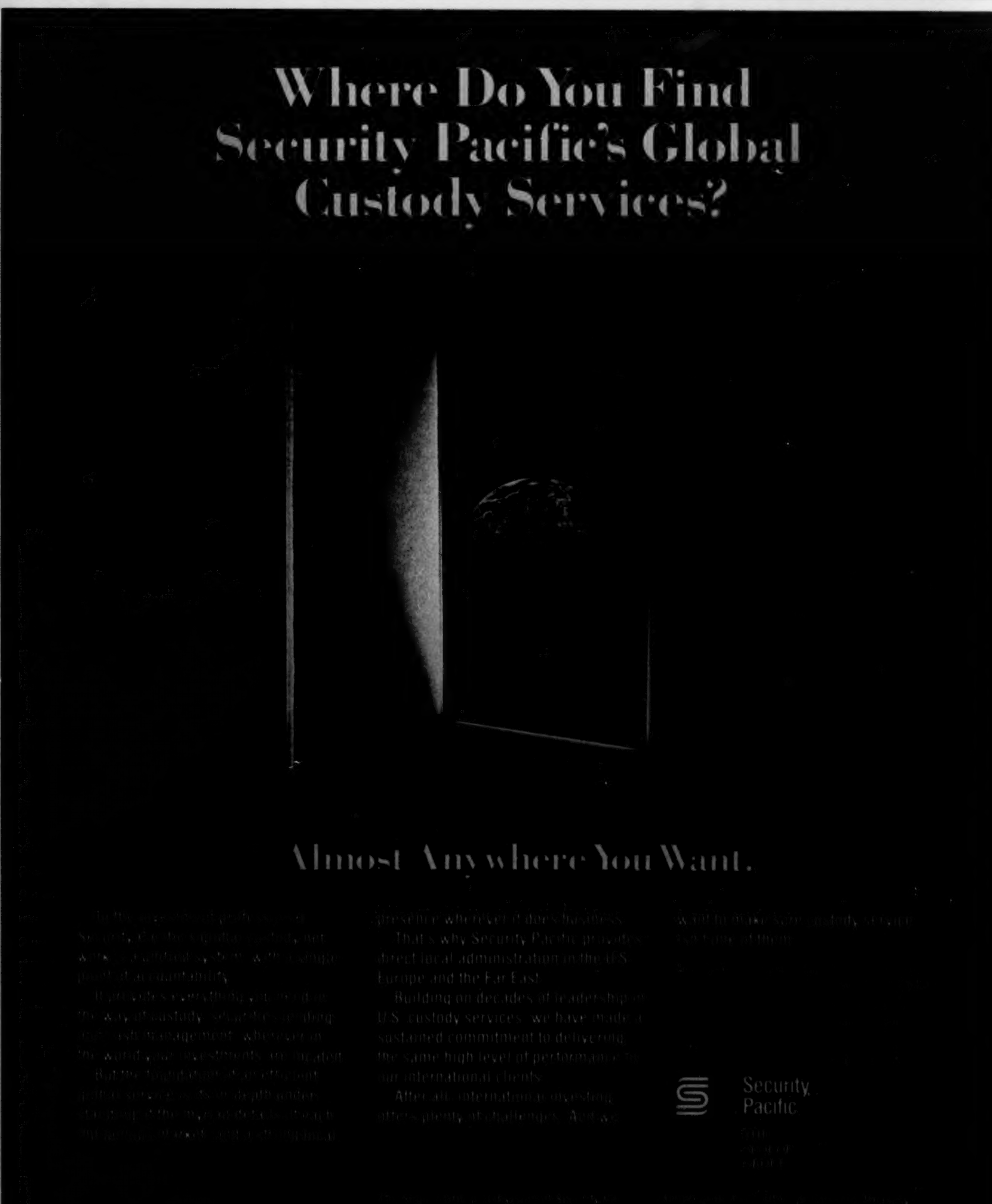
411 W. Lafayette, Detroit, Mich.
48226; (313) 222-5414

Domestic master trust assets	$18,884,000,000
Tax-exempt	$18,884,000,000
Domestic master custodial	$6,720,000,000
Tax-exempt	$4,565,000,000
Taxable	$2,155,000,000
Domestic master trust clients	20
Domestic master custodial clients:	
Tax-exempt	50
Taxable	4
Account supervisors	10
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

Manufacturers National Bank of Detroit reported new, tax-exempt domestic master trust business of $2 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $127 million.

The primary accounting method is trade date, fully accrued. Settlement date accounting also is offered.

Services offered in the basic master trust/master custodial agreement are trusteeship, custody, settlement, income collection, corporate action processing, cash management, reporting and plan accounting.



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Performance measurement, TUCS, performance consulting, participant record keeping, benefit payments, securities lending, global custody, stock and bond index funds, investment management, downloading and on-line reporting are available for additional fees.

Other record-keeping services offered include defined contribution participant record keeping, including participant loan processing and lump-sum distributions.

New features include multicurrency accounting, enhanced global custody capabilities and on-line portfolio performance and analytics.

Fees are based on asset value, transactions and holdings.

Larry Rankens is the client contact.

Marine Midland Bank N.A.

250 Park Ave., Third Floor, New York,
N.Y. 10177; (212) 503-2724

Domestic master trust assets	$2,000,000,000
Tax-exempt	$2,000,000,000
Domestic master custodial	$1,600,000,000
Tax-exempt	$1,000,000,000
Taxable	$600,000,000
Domestic master trust clients	35
Domestic master custodial clients	
Tax-exempt	6
Taxable	8
Account supervisors	10

Marine Midland Bank N.A. reported new, tax-exempt domestic master trust business of $225 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $170 million.

The primary accounting method is accrual trade date. Settlement date accounting also is offered.

A standard master trust/master custodial service agreement is offered.

Performance measurement, participant record keeping, securities lending and benefit disbursement are available for additional fees.

Fees are based on asset value and services provided.

Moira Patterson is the client contact.

Marshall & Ilsley Trust Co.

770 N. Water St., Milwaukee, Wis.
53202; (414) 287-7187

Domestic master trust assets	$1,700,000,000
Tax-exempt	$1,700,000,000
Domestic master custodial	$1,900,000,000
Tax-exempt	$1,900,000,000
Domestic master trust clients	48
Domestic master custodial clients	7
Account supervisors	9
Reports available on-line	
Monthly transaction	
Asset & liability	

Marshall & Ilsley Trust Co. reported new, tax-exempt domestic master trust business of $180 million in the year ended June 30.

The primary accounting method is accrual.

Services offered in the basic master trust/master custodial agreement are performance measurement, ERISA disclosure, benefit disbursement, investment management and participant record keeping.

On-line access and data downloading are available for additional fees.

Fees are based on asset value and individual services.

Morry L. Birnbaum is the client contact.

Mellon Bank

1 Mellon Bank Center, Suite 3325,
Pittsburgh, Pa. 15258; (412)
234-1336

Domestic master trust assets	$124,349,000,000
Tax-exempt	$123,056,000,000
Taxable	$1,293,000,000
Domestic master custodial	$37,285,000,000
Tax-exempt	$17,163,000,000
Taxable	$20,122,000,000
Domestic master trust clients	
Tax-exempt	147
Taxable	13
Domestic master custodial clients	
Tax-exempt	40
Taxable	55
Reports available on-line	
Monthly transaction	
Asset & liability	
Performance measurement	

Mellon Bank reported new, tax-exempt domestic master trust business of $5.7 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $1.7 billion.

The primary accounting method is trade date fully accrued. Cash accounting also is offered.

Services offered in the basic master trust/master custodial agreement are conversion, administration, automated cash sweep, cash management, accounting and reporting.

Securities lending, global custody, participant record keeping, pension disbursement, performance measurement, options, futures and on-line services are available for additional fees.

New features include global securities lending.

Fees are based on an account base charge, asset value charge and transaction charge.

Timothy F. Keaney is the client contact.

Montreal Trust Co. of Canada

15 King St. W., Toronto, Ontario M5H
1B4; (416) 860-5948

Canadian master trust assets	$8,250,
Tax-exempt assets	$8,250,
Domestic master trust clients	
Account supervisors	
Reports available on-line	
Monthly transaction	
Asset & liability	

Montreal Trust Co. of Canada's primary a
ing method is settlement date.

Services offered in the basic master trust
custodial agreement are safekeeping, acc
records, accounting statements and asset
tions.

Transaction/activity, additional participants
zation, investment portfolio accounts partic
on a segregated basis, mortgage adminis
audit letters, strip coupon custody, benef
ments, dial-up systems, customized repor
government reports are available for add
fees.

Fees are based on average book value.

The client contact is Terry McLeod.

NBD Bank N.A.

611 Woodward Ave., Detroit, Mich
48226; (313) 225-2660

Domestic master trust assets	$12,904,00
Tax-exempt	$12,904,00
Domestic master custodial	$23,025,00
Tax-exempt	$22,241,00
Taxable	$784,00
Domestic master trust clients	
Domestic master custodial clients:	
Tax-exempt	
Taxable	
Account supervisors	
Reports available on-line:	
Monthly transaction	
Asset & liability	

NBD Bank N.A. reported new, tax-exemp
mestic master trust business of $115 million i
year ended June 30 and new, tax-exempt dom
master custodial business of $676 million.

The primary accounting methods are trade
and settlement date recognition for securities
pending trades and income accrual schedules.

Services offered in the basic master trust/m
custodial agreement are custody, benefit disb
ment, cash management, performance mea
ment, portfolio review, domestic and global s
ties lending, global custody, on-line downlo
and on-line inquiry.

Participant record keeping and investment
agement are available for additional fees.

Other record-keeping services offered inc
mutual fund accounting.

New features include on-line inquiry, global
rity lending, performance measurement graph
ports, enhanced benefit disbursement and g
custody services.

Fees for domestic services are based on
value and transactional analysis.

Jon R. Mittler is the client contact.

The Northern Trust Co.

50 S. LaSalle St., Chicago, Ill. 6067
(312) 630-6000

Domestic master trust assets	$110,664,00
Tax-exempt	$110,664,00
Domestic master custodial	$128,306,00
Tax-exempt	$90,938,00
Taxable	$37,368,00
Domestic master trust clients	
Domestic master custodial clients:	
Tax-exempt	
Taxable	
Account supervisors	
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

The Northern Trust Co. reported new, tax-ex
domestic master trust business of $5.349 bil
the year ended June 30 and new, tax-exemp
mestic master custodial business of $20.283 bi

The primary accounting method is settle
date, fully accrued. Trade date accounting
is offered.

Services offered in the basic master trust/m
custodial agreement are custody, daily pricing,
settlements, income collections and capital
ture changes, and standard reporting.

Global custody, electronic delivery, perform
analysis, securities lending, benefit payments,
accounting, cash management and investmen
vices are available for additional fees.

New features include expanded internationa
curities lending, enhanced global on-line info
tion, and a public fund universe for perform
analysis.

Fees for domestic services are based o
number of investment managers, the number
types of transactions and the market valu
assets.

Thomas W. Kimen is the client contact.

Norwest Bank Minnesota

South Street & Marquette Avenue,
Minneapolis, Minn. 55479-0035;
(612) 667-0694

Domestic master trust assets	$3,300,00
Tax-exempt	$3,300,00
Domestic master custodial	$1,200,00
Tax-exempt	$1,200,00
Domestic master trust clients	
Domestic master custodial clients	
Account supervisors	
Reports available on-line	
Monthly transaction	
Asset & liability	
Performance measurement	

Norwest Bank Minnesota reported new, ta
empt domestic master trust business of $412 m
in the year ended June 30 and new, tax-ex

Bank of Montreal
and
Harris Bank

are pleased to announce the formation of

Bank of Montreal
Global Custody

under the management of
Harris Trust and Savings Bank

Bank of Montreal Global Custody
provides services to clients worldwide
and holds in custody more than $12 billion in assets.

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Bank of Montreal

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domestic master custodial business of $100 million.

The primary accounting method is trade date full accrual. Settlement date accounting also is offered.

Services offered in the basic master trust/master custodial agreement are administration, custody, trade settlement, income collection, capital structure changes, daily pricing, tax lot accounting, investment reports and automated cash sweeps.

Securities lending, performance measurement, portfolio analytics, on-line access, custom investment management, participant record keeping and pension disbursement are available for additional fees.

New features include multiple pricing services, enhanced custom reports and on-line product enhancement.

Fees are based on the number of investment managers, the types and number of transactions and market value of the assets.

Jill Johnson is the client contact.

Royal Trust Corp. of Canada

P.O. Box 7500, Station "A", Toronto,
Ontario M5W 1P9; (416) 981-7000

Canadian master trust assets	$25,520,000,000
Tax-exempt	$25,520,000,000
Domestic master trust clients	104

Royal Trust Corp. of Canada's primary accounting method is statement date. Adjustments are made on statements to reflect pending transactions are offered.

The basic master trust/master custodial agreement offers a full range of sponsor support services, including performance measurement and record keeping.

Other record-keeping services offered include full defined contribution record keeping.

Fees for domestic services are based on asset value and transactions.

Norma Young-Mayer is the client contact.

Security Pacific Bank

333 S. Grand, Suite 1740, Los
Angeles, Calif. 90071; (213)
229-2999

Domestic master trust assets	$22,000,000,000
Tax-exempt	$20,000,000,000
Taxable	$2,000,000,000
Domestic master custodial	$227,000,000,000
Tax-exempt	$50,000,000,000
Taxable	$177,000,000,000
Domestic master trust clients:	
Tax-exempt	30
Taxable	10
Domestic master custodial clients:	
Tax-exempt	55
Taxable	320
Account supervisors	100

Security Pacific Bank reported new, tax-exempt domestic master trust business of $3 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $13 billion.

The primary accounting methods are trade date for trust accounts and cash for custody accounts. Settlement, accrual, LIFO, FIFO, average cost and amortization/accretion accounting also are offered.

Services offered in the basic master trust/master custodial agreement are safekeeping, clearing, income collection, capital change notification, reporting, on-line access, ERISA reporting and report writer.

Investment management, performance measurement/analytics, securities lending, global custody, benefit payments and unitized accounting are available for additional fees.

New features include the report writer, on-line performance measurement, automated capital change and an enhanced on-line trade input/inquiry system.

The cost is based on a combination of asset-based fees and unbundled transaction fees.

Brad Marcus is the client contact.

Security Trust Co. N.A.

1501 Pennsylvania Ave. N.W.,
Washington, D.C. 20013; (202)
624-4158

Domestic master trust assets	$1,211,000,000
Tax-exempt	$969,000,000
Taxable	$242,000,000
Domestic master custodial	$6,008,000,000
Tax-exempt	$1,979,000,000
Taxable	$4,029,000,000
Domestic master trust clients:	
Tax-exempt	64
Taxable	15
Domestic master custodial clients:	
Tax-exempt	37
Taxable	20
Account supervisors	13
Reports available on-line:	
Monthly transaction	
Asset & liability	

Security Trust Co. N.A. reported new, tax-exempt domestic master trust business of $103 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $182 million.

The primary accounting method is settlement date. Trade date/accrual accounting also is offered.

Services offered in the basic master trust/master custodial agreement are record keeping, trusteeship, securities safekeeping and settlement, and investment management.

Consulting, prototype plans, unitized accounting, administrative procedure review and plan communications are available for additional fees.

Other record-keeping services offered include 5500 format and performance measurement.

New features include an open-end mutual fund family.

Fees are based on market value with transaction charges.

The master trust client contact is Lisa MacInnes; the master custody client contact is Kathy A. Jackson.

State Street Bank and Trust

P.O. Box 1992, Boston, Mass.
02105-1992; (617) 847-2511

Domestic master trust assets	$136,859,000,000
Tax-exempt	$135,208,000,000
Taxable	$1,651,000,000
Domestic master custodial	$162,050,000,000
Tax-exempt	$151,427,000,000
Taxable	$10,623,000,000
Domestic master trust clients:	
Tax-exempt	195
Taxable	1
Domestic master custodial clients:	
Tax-exempt	99
Taxable	4
Account supervisors	91
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

State Street Bank and Trust Co. reported new, tax-exempt domestic master trust business of $5.198 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $6.023 billion.

The primary accounting method is trade date, full accrual. Tax lot, LIFO and FIFO accounting also are offered.

Services offered in the basic master trust/master custodial agreement are trusteeship, safekeeping, cash management, trade settlement, income collection, corporate action monitoring, daily/weekly/monthly valuation, fiduciary control and on-line access.

Global custody, global asset allocation, domestic and international index funds, performance measurement and analytics, securities lending and dividend reinvestment are available for additional fees.

Other record-keeping services offored include participant record keeping, plan accounting, mutual fund accounting and insurance reporting.

New features include integrated delivery of domestic and international accounting, automated options, automated Fed book entry system, advanced wire transfer system, real estate and venture capital accounting and performance measurement products, and insurance and private mutual fund services.

Fees are based on individual client needs, asset value, and transaction and per-portfolio charges.

Frank Antin is the client contact.

Trust Co. Bank (SunTrust Banks Inc.)

P.O. Box 4655, Atlanta, Ga. 30302;
(404) 588-8206

Domestic master trust assets	$1,518,000,000
Tax-exempt	$1,518,000,000
Domestic master custodial	$2,389,000,000
Tax-exempt	$1,545,000,000
Taxable	$844,000,000
Domestic master trust clients	14
Domestic master custodial clients:	
Tax-exempt	6
Taxable	5
Account supervisors	11
Reports available on-line:	
Monthly transaction	
Asset & liability	

Trust Co. Bank (SunTrust Banks Inc.) reported new, tax-exempt domestic master trust business of $20 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $486 million.

The primary accounting method is trade date/full accrual. Contractual settlement date and cash accounting also are offered.

Services offered in the basic master trust/master custodial agreement are directed trade settlement, safekeeping, income collection, cash management and financial reporting, including plan unitization.

Securities lending, global custody, performance measurement, on-line access/download, participant record keeping and benefit disbursement are available for additional fees.

New features include report downloading capabilities.

Fees are based on market value and transactional fees.

Roger M. Birkholz is the client contact.

United States Trust Co.

114 W. 47th St., New York, N.Y.
10036-1532; (212) 852-1000

Domestic master trust assets	$65,500,000,000
Tax-exempt	$15,500,000,000
Taxable	$50,000,000,000
Domestic master custodial	$78,700,000,000
Tax-exempt	$5,400,000,000
Taxable	$73,300,000,000
Domestic master trust clients:	
Tax-exempt	107
Taxable	25
Domestic master custodial clients:	
Tax-exempt	48
Taxable	109
Account supervisors	26
Reports available on-line:	
Monthly transaction	
Asset & liability	
Performance measurement	

United States Trust Co. reported new, tax-exempt domestic master trust business of $498 million in the year ended June 30 and new, tax-exempt domestic master custodial business of $658 million.

The primary accounting methods used are trade date, contractual settlement and actual settlement, all with full accruals. Average cost, tax lot, amortization, accretion and full liability accounting also are offered.

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(213) 478-1021 Outside California (800) 624-2890

Master trust/custody banks ranked by U.S. taxable assets*

Firm	Total	Master trust	Master custody
Chase Manhattan	263,000	—	263,000
Security Pacific	179,000	2,000	177,000
United States Trust	123,300	50,000	73,300
Continental Bank	68,366	—	68,366
Bank of America	67,000	—	67,000
Manufacturers Hanover	42,300	2,500	39,800
Northern Trust	37,368	—	37,368
Bank of New York	25,195	22,123	3,072
Harris Trust	25,000	—	25,000
Citibank	22,776	33	22,743
Mellon Bank	21,415	1,293	20,122
Bankers Trust	14,800	1,000	13,800
State Street	12,274	1,651	10,623
Chemical Bank	11,005	—	11,005
Bank IV	4,481	—	4,481
Security Trust	4,271	242	4,029
First Wachovia	3,750	—	3,750
CoreStates Bank	3,168	—	3,168
First Nat'l/Chicago	2,997	15	2,982
Manufacturers Nat'l/Detroit	2,155	—	2,155
First Trust	1,203	—	1,203
Boston Safe Deposit	1,184	471	713
Hibernia Trust	969	—	969
Trust Co. Bank	844	—	844
NBD	784	—	784
Bank of Oklahoma	660	660	—
Marine Midland	600	—	600
First Interstate/California	525	—	525
Total	**940,390**	**81,988**	**858,402**

* includes mutual funds and corporate accounts

Services offered in the basic master trust/master custodial agreement are full monthly and annual accounting, on-line period-to-date accounting, on-line cash projection, Form 5500, options and futures accounting, legal and regulatory reporting, cash management, STIF sweep, corporate actions, proxy notifications, income collections, trade settlement, plan allocation, dividend reinvestment and full investment manager services.

Performance measurement, securities lending, investment analytics and consulting, global custody, benefit payments, passive and structured management, record keeping, flexible short-term money management, customized reporting and graphics, trade execution monitoring, and CPU to CPU interface and workstation capabilities are available for additional fees.

Other record-keeping services offered include full participant record keeping for 401(k) and profit-sharing plans; full mutual fund record keeping, daily pricing and processing of contribution and redemptions also are offered.

New features include enhancements to the firm's on-line asset management system, including on-line cash projections, real-time cash and securities settlements, on-line principal and income security history, and the integration of its automated security movement and control system.

Fees are based on transaction volumes, market value and services provided.

Schuyler V. Grant is the client contact.

Wilmington Trust Co.

Rodney Square North, Wilmington,
Del. 19890; (302) 651-1000

Domestic master trust assets	$19,094,000,000
Tax-exempt	$19,094,000,000
Domestic master custodial	$333,000,000
Tax-exempt	$333,000,000
Domestic master trust clients	12
Domestic master custodial clients	5
Account supervisors	5

Reports available on-line
- Monthly transaction
- Asset & liability

Wilmington Trust Co. reported new, tax-exempt domestic master trust business of $5.13 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $202 million.

The primary accounting method is trade date, fully accrued. Contractual settlement date and cash accounting also are offered.

Services offered in the basic master trust/master custodial agreement are custody, cash management, master trust reporting, options and futures processing and performance measurement.

Investment and analytic services, on-line access, securities lending, global custody, pension disbursement and participant record keeping are available for additional fees.

Fees are based on asset value and transaction charges.

Barbara A. Uberti is the client contact.

GLOBAL

Bank of America

555 California St., San Francisco,
Calif. 94104; (415) 622-2015

Total global custody assets	$10,500,000,000
U.S. tax-exempt	$2,000,000,000
U.S. tax-exempt clients	10
Account supervisors	12

Reports available on-line
- Monthly transaction

Bank of America oversaw $10.5 billion in total global custody assets as of June 30.

Germany, Japan and the United Kingdom are serviced by the global custody network. Twenty-eight other countries are served by a subcustodian. The bank assists clients with foreign tax withholding in all countries in the network.

Fees are based on a flat, fixed fee or on a per-product price, based on an agreed upon service plan.

Other record-keeping services include multicurrency accounting, monthly activity reports, and fund accounting for non-U.S. based funds with offshore investments.

The client contact is Robert Darmanin.

Bank of New York

1 Wall St., New York, N.Y. 10286;
(212) 495-1784

Total global custody assets	$24,200,000,000
U.S. tax-exempt	$3,500,000,000
U.S. tax-exempt clients	20
Account supervisors	22

Reports available on-line
- Monthly transaction
- Asset & liability
- Performance measurement

The Bank of New York oversaw $24.2 billion in total global custody assets as of June 30.

The United Kingdom is serviced by the global custody network. Twenty-eight other countries are served by a subcustodian. The bank assists clients with foreign tax withholding in all countries in its network.

Fees are calculated individually, based on market asset value, transactions, portfolio structure and services required.

Other record-keeping services include a multicurrency reporting package, available monthly, quarterly and annually.

The client contacts are Curtis A. Vamaka and Janet Zatsan.

Bankers Trust Co.

280 Park Ave., New York, N.Y. 10017;
(212) 850-4652

Total global custody assets	$15,329,000,000
U.S. tax-exempt	$2,513,000,000
U.S. tax-exempt clients	62
Account supervisors	15

Bankers Trust oversaw $15.3 billion in total global custody assets as of June 30.

Countries serviced by the global custody network are Ireland, Switzerland and the United Kingdom. Twenty-nine other countries are serviced by a subcustodian. The firm assists with foreign tax withholding in all countries in the network.

Fees are calculated on the basis of transaction volume, asset size and distribution across markets.

Other record-keeping services include daily on-line activity reports, multicurrency services, and performance measurement.

The client contact is Mary Ann Schreiber.

Barclays Bank PLC

75 Wall St., New York, N.Y. 10265;
(212) 412-3439

Total global custody assets	$75,000,000,000
U.S. tax-exempt	$500,000,000
U.S. tax-exempt clients	3

Reports available on-line
- Monthly transaction
- Asset & liability
- Performance measurement

Barclays Bank oversaw $75 billion in total global custody assets as of June 30.

Countries serviced by the global custody network are Australia, Canada, France, Germany, Hong Kong, Ireland, Italy, Japan, the Netherlands, New Zealand, Portugal, Singapore, Spain, Switzerland and the United Kingdom. Fifteen other countries are served by a subcustodian. The bank assists clients with foreign tax withholding in all applicable countries, depending on tax treaties and the client's status.

Fees are calculated on the basis of the market value of the assets held, transaction activity and reporting requirements.

Other record-keeping services offered include full multicurrency reporting.

The client contact is Paul Corelli.

Boatmen's Trust Co.

100 N. Broadway, St. Louis, Mo.
63102; (314) 466-3800

Total global custody assets	$311,000,000
U.S. tax-exempt	$311,000,000

Reports available on-line:
- Monthly transaction
- Asset & liability
- Performance measurement

Boatmen's' Trust Co. oversaw $311 million in total global custody assets as of June 30.

The bank offers a "private label" product, for which Bankers Trust and Chase Manhattan are the primary suppliers of the subcustodial network. Thirty-one countries are serviced by that network.

The bank assists clients with foreign tax withholding in all countries where dual taxation treaties exist.

Fees are calculated as a combination of asset-based fees and transaction fees.

The client contact is Richard W. Hibbs.

Boston Safe Deposit & Trust

1 Boston Place, Boston, Mass. 02108;
(617) 722-7000

Total global custody assets	$21,204,000,000
U.S. tax-exempt	$10,401,000,000
U.S. tax-exempt clients	51
Account supervisors	25

Reports available on-line
- Monthly transaction
- Asset & liability
- Performance measurement

Boston Safe Deposit & Trust Co. oversaw $21.2 billion in total global custody assets as of June 30.

The United Kingdom is serviced by the global custody network. Thirty-three other countries are served by subcustodians. The bank assists clients with foreign tax withholding in all countries within its network.

Fees are based on any of the following five elements: portfolio charges (i.e. number and type); asset-based charges, assessed on the market value of total assets held; transaction charges, based on all securities settlements; ancillary services, such as performance measurement and on-line access; and incremental costs.

Other record-keeping services include benefit disbursements, record keeping, performance measurement, analysis and on-line inquiry and reporting.

The client contact is John L. Carty.

Brown Brothers Harriman

40 Water St., Boston, Mass. 02109;
(617) 742-1818

Total global custody assets	$113,580,000,000
U.S. tax-exempt	$238,000,000
U.S. tax-exempt clients	5
Account supervisors	250

Reports available on-line:
- Monthly transaction
- Asset & liability

Brown Brothers Harriman & Co. oversaw $113.6 billion in total global custody assets as of June 30.

Luxembourg is serviced by the global custody network. Thirty-three other countries are served by a subcustodian. The bank assists clients with foreign tax withholding in all countries within its network.

Fees are calculated on a percentage of assets, plus a flat transaction charge. Out-of-pocket expenses are passed through to the client.

Other record-keeping services include double-entry multicurrency accounting, including a full general ledger, and participant accounting.

The client contact is Kristen F. Giarrusso.

Chase Manhattan Bank N.A.

1211 Sixth Ave., New York, N.Y.
10036; (212) 730-2716

Total global custody assets	$114,000,000,000
U.S. tax-exempt	$23,900,000,000
U.S. tax-exempt clients	41
Account supervisors	24

Reports available on-line:
- Monthly transaction
- Asset & liability

Chase Manhattan Bank N.A. oversaw $114 billion in total global custody assets as of June 30.

Countries serviced by the global custody network are Argentina, Australia, Brazil, Chile, Germany, Hong Kong, Italy, Japan, Singapore, Spain, Thailand, Turkey and the United Kingdom. Twenty other countries are served by a subcustodian.

The bank assists clients with foreign tax withholding in nine countries.

Fees are calculated by market value, transaction type and volume, and portfolio type and volume by country.

Other record-keeping services include multicurrency valuation, tax lot reporting, participant record-keeping, securities lending reporting, benefit payments reporting and transfer agent.

The client contact is David Willour.

Employee benefit trends will be highlighted Dec. 10.

Chemical Bank

55 Water St., New York, N.Y. 10041;
(212) 820-5000

Total global custody assets	$14,041,000,000
Account supervisors	6

Reports available on-line
- Monthly transaction
- Asset & liability

Chemical Bank oversaw $14 billion in total global custody assets as of June 30.

Countries serviced by the global custody network are Belgium, Guernsey, Luxembourg and the United Kingdom. Twenty-six other countries are served by a subcustodian. The bank assists clients with foreign tax withholding in all countries in the network.

Fees are calculated by volume and country activity.

Other record-keeping services include full accrual accounting and reporting, cash management services and on-line inquiry and input reporting.

The client contact is Clive Gande in London at 071-380-5143.

Citibank N.A.

111 Wall St., New York, N.Y. 10043;
(212) 559-1000

Total global custody assets	$78,000,000,000
U.S. tax-exempt	$1,400,000,000
U.S. tax-exempt clients	9
Account supervisors	250

Reports available on-line:
- Monthly transaction
- Asset & liability

Citibank N.A. oversaw $78 billion in total global custody assets as of June 30.

Countries serviced by the global custody network are Argentina, Austria, Australia, Brazil, Canada, Chile, France, Germany, Greece, Hong Kong, India, Indonesia, Italy, Japan, Jordan, Korea, Luxembourg, Malaysia, Mexico, the Netherlands, New Zealand, Philippines, Portugal, Puerto Rico, Singapore, Spain, Switzerland, Taiwan, Thailand, Turkey, the United Kingdom, Uruguay and Venezuela. Twelve other countries are served by a subcustodian. The bank assists clients with foreign tax withholding in countries where applicable.

Fees may be either transaction or market-value based; may be tiered by region or geographic location; and may include subcustodian fees. Fees may be offset by balances.

Other record-keeping services include income collection, multicurrency accounting and foreign exchange.

The client contact is Rebecca K. Crain.

Continental Bank

231 S. LaSalle St., Chicago, Ill. 60697;
(312) 828-4038

Total global custody assets	$2,600,000,000
U.S. tax-exempt	$400,000,000
U.S. tax-exempt clients	6
Account supervisors	3

Reports available on-line
- Monthly transaction
- Asset & liability

Continental Bank oversaw $2.6 billion in total global custody assets as of June 30.

The global custody network is composed of twenty-four countries, all serviced by subcustodians. The bank assists clients with foreign tax withholding in all countries where dual tax treaties exist.

Fees are unbundled, based on market value and transactions, and vary according to costs of investing in various foreign markets.

Other record-keeping services include international securities lending, foreign exchange and risk management.

The client contact is Cheryl A. Derezinski.

CoreStates Bank N.A.

P.O. Box 7558, Philadelphia, Pa.
19101-7558; (215) 786-7327

Total global custody assets	$700,000,000
U.S. tax-exempt	$700,000,000
U.S. tax-exempt clients	7

Reports available on-line:
- Monthly transaction
- Asset & liability
- Performance measurement

CoreStates Bank N.A. oversaw $700 million in total global custody assets as of June 30.

The bank offers a "private label" product, for which State Street Bank & Trust Co. is the primary supplier of the subcustodial network. Twenty-six countries are served by the network. The bank assists clients with foreign tax withholding in all applicable countries.

The client contact is Allen R. Bradley.

First Interstate Bank-California

707 Wilshire Blvd., W10-S, Los
Angeles, Calif. 90017; (213)
614-3210

Total global custody assets	$240,000,000
U.S. tax-exempt	$240,000,000

Reports available on-line:
- Monthly transaction
- Asset & liability
- Performance measurement

First Interstate Bank-California oversaw $240 million in total global custody assets as of June 30.

The bank offers a "private label" product, for which Chase Manhattan is the primary supplier of the subcustodial network. Thirty-three countries are serviced by the network. The bank assists clients with foreign tax withholding in all countries in the network.

Fees are based on transaction type and number as well as market value.

The client contact is Deborah Dilley.

Public funds will be the subject of a special report Oct. 29.

Master trust/master custody banks ranked by new business*
U.S. $ mils.

Firm	Total new business	New master trust	Clients	New master custody	Clients
Northern Trust	25,632	5,349	5	20,283	29
Chemical Bank	22,233	2	1	22,231	3
Security Pacific	16,000	3,000	12	13,000	30
State Street	11,221	5,198	21	6,023	23
Bankers Trust	11,100	2,500	15	8,600	14
Mellon Bank	7,400	5,700	20	1,700	9
Wilmington Trust	5,332	5,130	3	202	2
Ameritrust	4,137	237	3	3,900	6
Chase Manhattan	3,385	1,576	6	1,809	3
Bank of New York	2,725	722	11	2,003	8
Mfg. Hanover	2,400	900	15	1,500	27
Boston Safe Deposit	2,050	1,200	5	850	3
Continental Bank	2,040	1,109	7	931	14
Boatmen's Trust	1,594	303	3	1,291	6
United States Trust	1,156	498	7	658	3
Hibernia Trust	849	5	3	844	3
Harris Trust	803	803	5	—	—
NBD	791	115	8	676	10
First Wachovia	754	653	11	101	3
First Interstate/Calif.	614	600	4	14	1
First Trust	542	265	2	277	3
Norwest Bank Minn.	512	412	4	100	5
Trust Co. Bank	506	20	4	486	4
Marine Midland	395	225	4	170	5
First Nat'l/Chicago	387	45	2	342	1
Citibank	385	330	11	55	4
Security Trust	285	103	1	182	4
CoreStates Bank	264	264	4	—	—
First Wisconsin	193	193	5	—	—
Marshall & Ilsley	180	180	2	—	—
Bank of America	150	—	—	150	25
Mfg. Nat'l/Detroit	129	2	1	127	2
BayBanks	118	45	5	73	2
Bank of Boston	103	102	1	1	2
LaSalle Nat'l Trust	93	10	4	83	35
Bank of Oklahoma	10	10	7	—	—
Connecticut Bank	10	10	1	—	—
Total	**126,478**	**37,816**	**223**	**88,662**	**289**

The First National Bank of Boston

100 Federal St., Boston, Mass. 02110;
(617) 575-2152

Total global custody assets	$3,600,000,000
U.S. tax-exempt	$200,000,000
U.S. tax-exempt clients	3
Account supervisors	3

Reports available on-line
- Asset & liability

First National Bank of Boston oversaw $3.6 billion in total global custody assets as of June 30.

Twenty-nine countries are serviced by subcustodians in the global custody network. The bank assists clients with foreign tax withholding in eight countries.

Fees are calculated on the basis of market valuations and transactions (either fee per transaction or fee based on settlement consideration).

Other record-keeping services include full service accounting.

The client contact is John Bushby.

First National Bank of Chicago

1 First National Plaza, Chicago, Ill.
60670; (312) 732-8130

Total global custody assets	$7,271,000,000
U.S. tax-exempt	$1,257,000,000
U.S. tax-exempt clients	3
Account supervisors	5

Reports available on-line
- Monthly transaction
- Asset & liability
- Performance measurement

First National Bank of Chicago oversaw $7.271 billion in total global custody assets as of June 30.

There are 22 countries serviced by subcustodians in the global custody network. The bank assists clients with foreign tax withholding in all applicable countries.

Fees are based on asset value, transaction volumes and reporting requirements.

Other record-keeping services include income due/upcoming reports and daily activity reports.

The client contact is Dale R. Sorenson.

First Trust National Association

180 E. Fifth St., St. Paul, Minn. 55101;
(612) 223-7000

Total global custody assets	$800,000,000
U.S. tax-exempt	$75,000,000
U.S. tax-exempt clients	27
Account supervisors	5

Reports available on-line:
- Monthly transaction
- Asset & liability

First Trust National Association oversaw $800 million in total global custody assets as of June 30.

Twenty-four countries are served by the global custody network through subcustodians.

The bank assists clients with foreign tax withholding in all countries.

Fees are calculated on a quarterly basis and consist of transaction charges, issue charges and an inventory basis point charge, plus reimbursement for foreign out-of-pocket expenses.

The client contact is Dave Bodine.

First Wachovia Corp.

301 N. Main St., Winston-Salem, N.C.
27150; (919) 770-6348

Total global custody assets	$1,000,000,000
U.S. tax-exempt	$1,000,000,000
Account supervisors	3

Reports available on-line:
- Monthly transaction
- Asset & liability
- Performance measurement

First Wachovia Corp. oversaw $1 billion in total global custody assets as of June 30.

The bank offers a "private label" product, for which Chase Manhattan-London is the primary supplier of the subcustodial network. Thirty-one countries are serviced by the network.

Fees are asset and transaction based.

The client contact is Joyce Vanderlendin.

Harris Trust and Savings Bank

111 W. Monroe St., Chicago, Ill.,
60603; (312) 461-2121

Total global custody assets	$12,000,000,000
U.S. tax-exempt	$940,000,000
U.S. tax-exempt clients	35
Account supervisors	8

Reports available on-line:
- Monthly transaction
- Asset & liability
- Performance measurement

Harris Trust and Savings Bank oversaw $12 billion in total global custody assets as of June 30.

The global custody network is composed of 29 countries serviced by subcustodians. The bank assist clients with foreign tax withholding in all applicable countries.

A recent announcement of the formation of the Bank of Montreal Global Custody, to be managed by Harris Trust, will be fully implemented by yea end. At that time, all assets now under the control o subcustodians will be under Harris' control, as we as $8 billion now custodied at the Bank of Montrea in London.

Fees are based on a geographic band.

The client contact is Beth Stubenrauch.

Manufacturers Hanover

270 Park Ave., New York, N.Y. 10017;
(212) 270-2327

Total global custody assets	$70,000,000,000
U.S. tax-exempt	$1,500,000,000
U.S. tax-exempt clients	20
Account supervisors	30

Reports available on-line:
- Monthly transaction
- Asset & liability
- Performance measurement

Manufacturers Hanover oversaw $70 billion in total global custody assets as of June 30.

The United Kingdom is serviced by the global custody network. Thirty other countries are served by subcustodians. Foreign tax withholding assistance is offered in all countries in the global custody network.

Standard fees for core products are based on a fee for each security transaction and an ad-valorum charge on the value of the portfolio. Fees are typically structured in four bands, depending on the relative inefficiencies and costs of the various markets.

The client contact is Diane Reyes.

Manufacturers National Bank of Detroit

411 W. Lafayette, Detroit, Mich.
48226; (313) 222-5414

Total global custody assets	$275,000,000
U.S. tax-exempt	$275,000,000
Account supervisors	11

Reports available on-line:
- Monthly transaction
- Asset & liability
- Performance measurement

Manufacturers National Bank of Detroit oversaw $275 million in total global custody assets as of June 30.

The bank offers a "private label" product, for which Morgan Stanley Trust Co. is the primary supplier of the subcustodial network. The primary accounting and reporting functions are conducted internally by Manufacturers National.

Twenty-eight countries are serviced by the network. The bank assists clients with foreign tax withholding in all countries in the network.

Fees are calculated by asset value and transaction activity.

Other record-keeping services include defined contribution participant record keeping.

The client contact is Larry Rankens.

Mellon Bank

1 Mellon Bank Center, Suite 3325,
Pittsburgh, Pa. 15258; (412)
234-1336

Total global custody assets	$4,400,000,000
U.S. tax-exempt	$4,400,000,000
Account supervisors	24

Reports available on-line:
- Monthly transaction
- Asset & liability
- Performance measurement

Mellon Bank oversaw $4.4 billion in total global custody assets as of June 30.

The bank offers a "private label" product, for which Pictet & Cie is the primary supplier of the subcustodial network. Twenty-seven countries are serviced by the network. The bank assists clients with foreign tax withholding in all countries in the network.

Fees are calculated using an account base charge, asset value charge and transaction charge.

The client contact is Timothy F. Keaney.

Midland Securities Services

5 Laurence Pountney Hill, London
EC4R 0EU, U.K.; 071-260-5081

Total global custody assets	$85,600,000,000

Midland Securities Services oversaw $85.6 billion in total global custody assets as of June 30. The firm provides U.K., European and other regional sub-custodian services to U.S. global custody providers.

The United Kingdom is serviced by the global custody network directly. An additional 48 countries are serviced by a subcustodian.

The bank assists clients with foreign tax withholding in 20 countries.

Fees are calculated as a basis point charge on total asset value or per line of stock. Transaction charges are levied as a flat fee per receipt or delivery of shares. Prices vary by location.

The client contact is Richard Hogsflesh.

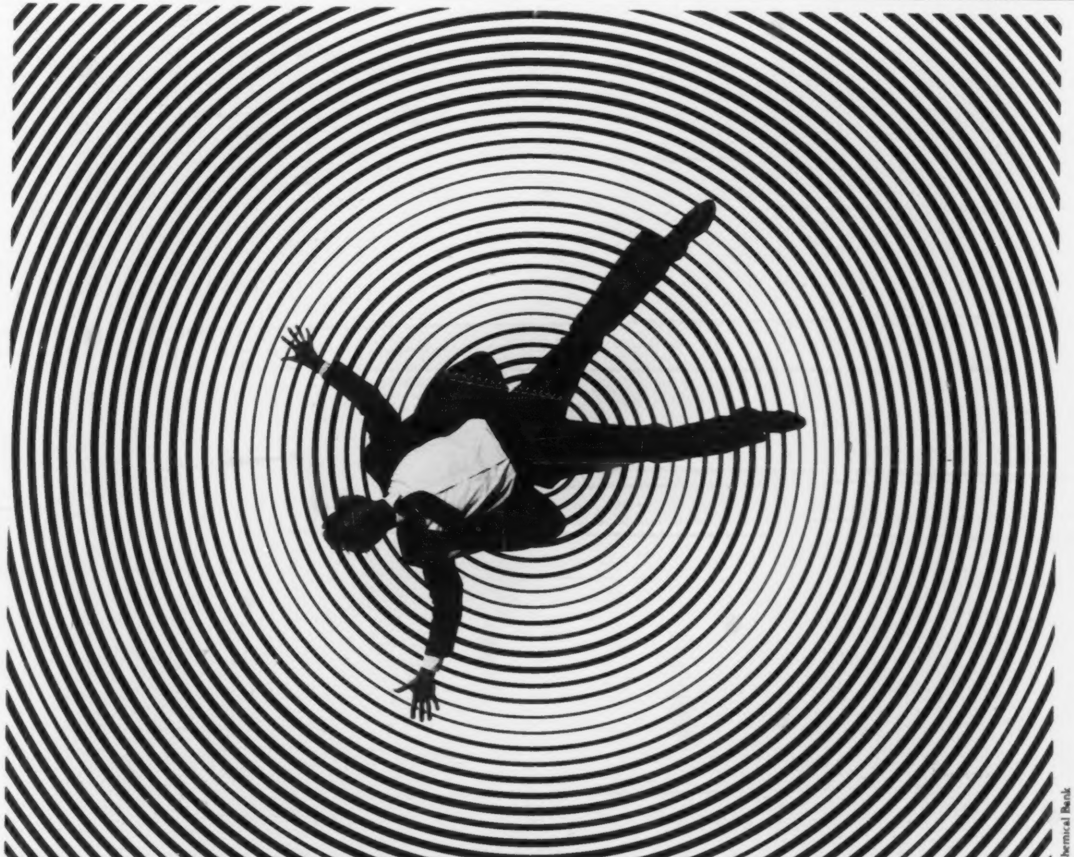
Mitsubishi Global Custody

800 Wilshire Blvd., Los Angeles, Calif.
90017; (213) 621-1393

Total global custody assets	$7,200,000,000
U.S. tax-exempt	$5,098,000,000
U.S. tax-exempt clients	27
Account supervisors	5

Reports available on-line:
- Monthly transaction
- Asset & liability

Mitsubishi Global Custody oversaw $7.2 billion in total global custody assets as of June 30.



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ChemicalBank
Financial Services Division

Japan is serviced by the global custody network. Twenty-one other countries are served by subcustodians. The bank assists clients with foreign tax withholding in 12 countries.

Fees are calculated based on market value plus a charge per transaction. Both vary by country.

Other record-keeping services include record keeping for securities lending.

The client contacts are Greg King and Dominick Alfano.

J.P. Morgan & Co.

60 Wall St., New York, N.Y. 10260;
(212) 648-3250

Total global custody assets	$45,000,000,000
U.S. tax-exempt	$6,000,000,000
U.S. tax-exempt clients	22
Account supervisors	17

J.P. Morgan & Co. oversaw $45 billion in total global custody assets as of June 30.

Countries serviced by the global custody network are Argentina, Belgium, Brazil, France, Germany, Italy, Japan, Spain, Switzerland and the United Kingdom. Subcustodians served 21 additional countries. The bank assists clients with foreign tax withholding.

Fees are structured as a percentage of the market value based on the country of investment plus a transaction charge.

The client contact is Rene Vanguestaine.

Morgan Stanley Trust Co.

1 Evertrust Plaza, Jersey City, N.J.
07302; (201) 915-3900

Total global custody assets	$13,500,000,000
U.S. tax-exempt	$489,000,000
U.S. tax-exempt clients	5
Account supervisors	14

Reports available on-line:
- Monthly transaction
- Asset & liability

Morgan Stanley Trust Co. oversaw $13.5 billion in total global custody assets as of June 30.

Japan is serviced by the global custody network. Twenty-seven other countries are served by subcustodians. The bank assists with foreign tax withholding in all countries in the network.

Fees are calculated on a two-tier fee schedule: safekeeping fees are billed as a percentage of assets and transactions are charged as a flat fee.

The client contact is John J. McManus.

NBD Bank N.A.

611 Woodward Ave., Detroit, Mich.
48226; (313) 225-2660

Total global custody assets	$500,000,000
U.S. tax-exempt	$500,000,000
Account supervisors	3

NBD Bank N.A. oversaw $500 million in total global custody assets as of June 30.

Countries serviced by the global custody network are Japan and the United Kingdom. Nineteen other countries are served by a subcustodian. The bank assists clients with foreign tax withholding in all countries within its network.

Fees are calculated based on asset value and transaction by country, subject to a minimum charge.

The client contact is Jon R. Mittler.

NCNB National Bank

1 NCNB Plaza (T10-10), Charlotte,
N.C. 28255; (704) 386-5115

Total global custody assets	$500,000,000
U.S. tax-exempt	$500,000,000
Account supervisors	3

Reports available on-line:
- Monthly transaction
- Asset & liability
- Performance measurement

NCNB National Bank oversaw $500 million in total global custody assets as of June 30.

The bank offers a "private label" product, for which Chase Manhattan Bank is the primary supplier of the subcustodial network. Thirty-two countries are serviced by the network. The bank assists clients with foreign tax withholding in all the countries in the network.

Fees are calculated on a base fee.

The client contact is K. Nick Kinney.

The Northern Trust Co.

50 S. LaSalle St., Chicago, Ill. 60675;
(312) 444-5254

Total global custody assets	$21,000,000,000
U.S. tax-exempt	$12,680,000,000
U.S. tax-exempt clients	86
Account supervisors	65

Reports available on-line:
- Monthly transaction
- Asset & liability
- Performance measurement

The Northern Trust Co. oversaw $21 billion in total global custody assets as of June 30.

Thirty-two countries are serviced by subcustodians. Clients are assisted with foreign tax withholding in all countries in the network.

Fees are negotiated on a case-by-case basis.

Other record-keeping services include participant level reporting for commingled funds and tax reclamation reporting.

The client contact is Jennifer K. Cameron.

Norwest Bank Minnesota

Sixth Street and Marquette Avenue,
Minneapolis, Minn. 55479-0035;
(612) 667-0694

Total global custody assets	$400,000,
U.S. tax-exempt	$400,000,
Account supervisors	

Reports available on-line:
- Monthly transaction
- Asset & liability
- Performance measurement

Norwest Bank Minnesota oversaw $400 million total global custody assets as of June 30.

The bank offers a "private label" product, which Morgan Stanley is the primary supplier of subcustodial network. Twenty-one countries served by the network. The bank assists clients foreign tax withholding in all countries within network.

Fees are based on account complexity and number and type of transactions.

The client contact is Jill Johnson.

Security Pacific Bank

333 S. Grand Ave., Suite 1700, Los
Angeles, Calif. 90071; (213)
229-2996

Total global custody assets	$6,000,000,0
U.S. tax-exempt	$1,500,000,0
U.S. tax-exempt clients	
Account supervisors	

Reports available on-line:
- Monthly transaction
- Asset & liability

Security Pacific Bank oversaw $6 billion in global custody assets as of June 30.

Countries serviced by the global custody netwo are Canada, Chile, France, Hong Kong, Japan, Ma laysia, Singapore, Switzerland, Thailand and th United Kingdom. Sixteen other countries are serve subcustodians. The bank assists clients with foreig tax withholding in all countries where applicable.

Fees are based on clearance and custody fee incorporating subcustodial charges and administra tive overhead.

The client contact is Cathy V. Holsey.

State Street Bank & Trust

P.O. Box 1992, Boston, Mass.
02105-1992; (617) 847-2511

Total global custody assets	$60,300,000,00
U.S. tax-exempt	$27,983,000,00
U.S. tax-exempt clients	7
Account supervisors	9

Reports available on-line:
- Monthly transaction
- Asset & liability
- Performance measurement

State Street Bank & Trust Co. oversaw $60. billion in total global custody assets as of June 30.

The United Kingdom is serviced by the glob custody network. Twenty-five other countries ar served by a subcustodian. The bank assists clien with foreign tax withholding in all applicable coun tries.

Fees are unbundled and are based on ass value, transactions and subcustodian holding costs.

Other record-keeping services include international mutual fund accounting, multicurrency performance measurement, international securities lending and consolidated record keeping for worldwide affiliates.

The client contact is Frank Antin.

Trust Co. Bank (SunTrust Banks Inc.)

P.O. Box 4655, Atlanta, Ga. 30302;
(404) 588-8206

Total global custody assets	$4,172,000,00
U.S. tax-exempt	$24,000,00

Trust Co. Bank (SunTrust Banks Inc.) oversa $4.172 billion in total global custody assets as June 30.

The bank offers a "private label" product, which State Street Bank & Trust Co. is the prima supplier of the subcustodial network. Twenty-seve countries are serviced by the network. The ba assists clients with foreign tax withholding in countries in the network.

Fees are calculated on net asset value.

The client contact is Seiki Sekimoto.

United States Trust Co.

114 W. 47th St., New York, N.Y.
10036-1532; (212) 852-1000

Total global custody assets	$1,193,000,00
U.S. tax-exempt	$317,000,00
U.S. tax-exempt clients	
Account supervisors	

Reports available on-line:
- Monthly transaction
- Asset & liability
- Performance measurement

United States Trust Co. oversaw $1.193 billion total global custody assets as of June 30.

Twenty-seven countries are serviced by th global custody network through a subcustodian. C ents are assisted with foreign tax withholding all countries in the network.

Fees are asset and transaction based.

Other record-keeping services include advance performance measurement services, daily prici and accruals, and investment analytics.

The client contact is Schuyler V. Grant.

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Fixed income performance based on Employee Benefit Bond Fund. Source: SEI

Mergers

Continued from page 25

"a little concerned" the merger might affect services. But that problem never materialized, he said.

The $2 billion New Mexico Educational Retirement Board used Irving Trust as its master custodian prior to the merger, and now is a Bank of New York customer. John E. Young, chief investment officer, termed the merger "generally pretty smooth . . . I think some of the strengths of both banks were combined, and as a result, they probably have a better (overall operation) than before."

Bank of New York officials echo that sentiment. They acknowledged certain merger problems — especially relating to employees' anxieties — but said all issues have been settled. The bank reports new clients, including Bank of England, which this year hired Bank of New York for securities lending, said Thomas J. Perna, executive vice president.

For the year ended June 30, Bank of New York reported $722 million in new domestic master trust business from 11 U.S. tax-exempt institutional clients and $2.003 billion in new domestic master custody business from eight clients.

Merging custody operations involved settling staffing issues; informing customers about events and asking for their input on related issues; and choosing systems. Although third in priority, selection of the reporting/accounting systems was the easiest and first accomplished, said Mr. Perna.

For master trust, bank officials decided to blend systems of Bank of New York and Irving Trust, which had been based on the same technology. Master trust and global custody systems are tied together and are modules of one large system, said Mr. Perna.

No jobs were eliminated in master trust/global custody. In fact, the area now has about 25 more staffers than at the end of 1988, said Curtis A. Yamaoka, senior vice president. Staff defections did occur at the time, mostly from Irving Trust, he said.

The merger prompted no service disruptions, Mr. Yamaoka said.

For various reasons, the Boatmen's-Centerre merger was easier, and the remaining bank — now with $2.2 billion in tax-exempt master trust assets and $16.3 billion in tax-exempt master custody assets — lost no time attracting new customers.

In each of the first two months after the merger was official, Boatmen's landed a significant new customer. "And the momentum has continued from there," reported Anthony Brown, manager of Boatmen's master trust custody administration.

For the year ended June 30, Boatmen's reported new domestic master trust business of $303 million from three U.S. tax-exempt institutional clients and $1.291 billion in new domestic master custody business from six clients.

The more than $5 billion Public School Retirement System of Missouri had been a customer of Boatmen's before the merger with Centerre. After the merger, the fund continued with Boatmen's and experienced "no change at all," said David W. Mustoe, the fund's executive secretary. The fund uses Boatmen's as its master custodian and as an investment manager, and generally likes the bank's operations, said Mr. Mustoe.

In Mr. Brown's view, "everything went smoothly" with the merger. Reasons he cited were the "two organizations match very well; the strengths on both sides" were recognized and addressed right away; and personnel issues were resolved quickly.

About a month after the merger, "we physically moved everyone together. There was no long, protracted period of people guessing how they would fit in," Mr. Brown said.

(Boatmen's Trust developed out of the broader merger of Boatmen's Bancshares Inc., which owned Boatmen's National Bank of St. Louis, and Centerre Bancorp., parent of Centerre Trust Co. The merger of the trust division of Boatmen's National Bank and Centerre Trust Co. created Boatmen's Trust.)

Moreover, the integration of systems also went smoothly. In the global custody area, the bank adopted Centerre's system because Boatmen's hadn't had a global custody operation. Centerre's master trust system also prevailed following a "careful analysis," said Mr. Brown.

For Boatmen's, the biggest issue was the name change, said Mr. Brown, who had joined Centerre shortly before the merger. Prior to the merger, Centerre's custody market share had exceeded Boatmen's.

To trumpet the new name, the bank advertised, visited clients, consultants and prospective clients and used direct mail. "It was not a hard sell. When everyone saw the players were the same and nothing had changed, they were very comfortable with that." ■

Insurer hires noted execs for new unit

LOUISVILLE, Ky. — Capital Holding Corp., a publicly owned insurance company in Louisville, formed a foreign currency investment advisory and asset management company.

The firm, Capital Holding Currency Advisors, will be managed jointly by Andrew J. Krieger and Jonathan M. Berg.

Mr. Krieger is a well-known currencies trader, who, in 1987, was reported to have earned more than $300 million in trading profits for Bankers Trust Co., New York. Since 1988, he has been the president of Krieger Investments Ltd., an asset management and advisory firm in Englewood Cliffs, N.J.

Mr. Berg previously was with Bankers Trust Co., New York, where he had a variety of senior management positions, including managing director and head of the Capital Markets Group-North America and deputy head of the Capital Markets Group-Global.

Based in Englewood Cliffs, N.J., Capital Holding Currency Advisors will specialize in currency options for institutional investors, central banks and wealthy individuals. The firm also will manage an undisclosed portion of Capital Holding's non-traditional investment portfolio. CHCA will be part of Capital Holding's Accumulation and Investment Group.

Mr. Berg said the firm will target clients in Asia and Europe. ■

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Custody

Continued from page 25

assets grew 10%, to $1.04 trillion from $944 billion, while master custody assets grew only 1.8%, to $872.3 billion from $856.5 billion.

Several bank executives, however, said this is contrary to what they are seeing among current and potential clients.

Corporate defined benefit plans, which tend to have a master trustee, have peaked, while growth continues among defined contribution plans, public pension funds, endowments and foundations, which usually have a master custodian.

"Clearly, most corporations have hired master trustees," Ms. Reynolds said.

"The business is clearly more mature."

"The growth is in the defined contribution market," Mr. Carty added.

Also, public funds are continuing to grow rapidly, Mr. Carty said. ■

Global custodians ranked by U.S. tax-exempt assets*

	$ mils.	Client number
State Street	27,983	76
Chase Manhattan	23,900	41
Northern Trust	12,680	86
Boston Safe	10,401	51
J.P. Morgan	6,000	22
Mitsubishi	5,098	27
Bank of New York	3,500	20
Bankers Trust	2,513	62
Bank of America	2,000	10
Mfg. Hanover	1,500	26
Security Pacific	1,500	32
Citibank	1,400	9
First Nat'l/Chicago	1,257	3
Harris Trust	940	35
Barclays Bank	500	3
NBD	500	n/a
Morgan Stanley	489	5
Continental Bank	400	6
Brown Brothers	238	5
First Nat'l/Boston	200	3
First Trust	75	27
Total	103,074	

Banks with third-party global networks

	$ mils.	Client number
Mellon Bank	4,400	na
First Wachovia	1,000	na
CoreStates Bank	700	7
NCNB Nat'l Bank	500	na
Norwest Bank Minn.	400	na
United States Trust	317	45
Boatmen's Trust	311	na
Man. Nat'l/Detroit	275	na
First Interstate/Calif.	240	na
Trust Co. Bank	24	2
Total	8,167	

Global custodians ranked by total custodial assets worldwide*

Firm	$ millions
Chase Manhattan	114,000
Brown Brothers Harriman	113,580
Midland Securities	85,600
Citibank	78,000
Barclays Bank	75,000
Manufacturers Hanover	70,000
State Street Bank	60,300
J.P. Morgan	45,000
Bank of New York	24,200
Boston Safe Deposit	21,204
Northern Trust	21,000
Bankers Trust	15,329
Chemical Bank	14,041
Morgan Stanley Trust	13,500
Harris Trust	12,000
Bank of America	10,500
First Nat'l/Chicago	7,271
Mitsubishi	7,200
Security Pacific	6,000
Mellon Bank	4,400
Trust Co. Bank	4,172
First Nat'l/Boston	3,600
Continental Bank	2,600
United States Trust	1,193
First Wachovia	1,000
First Trust	800
CoreStates Bank	700
NBD Bank	500
NCNB	500
Norwest Bank Minnesota	400
Boatmen's Trust	311
Manufacturers Nat'l Detroit	275
First Interstate/California	240
Total	814,416

* may include some double-counting because of subcustodial relationships

Survey

Continued from page 25

finished fourth in personnel with a 4.43.

Reporting — a monthly record of transactions and account activity provides plan sponsors with an accurate picture of the portfolio — is one of the most crucial areas in the master trust business. Mellon was No. 1 in overall reporting with a 4.19, followed by First Wachovia Corp. with 4.1 and Boston Safe Deposit and Trust Co. with 4.03. Four banks tied at 4 — Manufacturers National, National Bank of Detroit, U.S. Trust and Northern Trust.

In the other services category, Manufacturers National and U.S. Trust topped the list, each with a 4.5. Following were Mellon Bank, with 4.43; Bankers Trust Co., New York, with 4.27; and Northern Trust, 4.12.

Plan sponsors were asked to rate several criteria in order of importance in selecting a global custodian. Reporting capabilities was ranked at the top, followed by responsiveness, network, technology (automation), personnel and fees.

As in the master trustee category, the majority of global custodian clients responding (68.5%) said global custody fees were average, while 21.3% classified fees as high and 10.2% said fees were low.

Ranking after Mellon in overall global custody satisfaction were Northern Trust with 3.7, Chase with 3.6 and Bankers Trust and Mitsubishi Bank, each with 3.4.

In the areas of country coverage, which usually means the number of countries in which the bank can settle trades, and accuracy of reporting, Mellon ranked top in client satisfaction with ratings of 4.11 and 4.

Mellon was followed in country coverage satisfaction by Northern Trust, 4; Mitsubishi, 3.75; and Chase, 3.69.

In the accuracy of reporting category Mellon was followed by Chase with 3.73; Northern Trust, 3.68; and Harris Trust and Savings Bank, Chicago, and National Bank of Detroit, each with 3.67.

Mellon also topped the list in customer satisfaction in the areas of tax reclamation, 4; performance settlement, 4.1; dividend and interest posting, 4.2; and foreign exchange capability, 4.22.

Mellon was followed in the tax reclamation area by Northern Trust, 3.57, and Harris Trust, 3.33.

Northern Trust was second in the performance settlement category with 3.9; Chase was next with 3.67. ■

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Software can help cut through manager haze

LaPorte package a powerful yet flexible tool

By Stephen L. Kessler

In recent years, increasingly powerful manager search and evaluation, asset allocation and performance measurement capabilities have been made available to institutional investors through the publishing of sophisticated software packages.

This series will evaluate seven manager search packages, some of which offer additional capabilities as well: LaPorte Asset Allocation System, Burlington Hall Asset Management Inc.; M-Search™, Mobius Group; PSN PC, Plan Sponsor Network Inc.; CADENCE MicroUNIVERSE and MicroADVISOR, CDA Investment Technologies Inc.; CAMS II+, Performance Analytics Inc.; and WealthBuilder, Reality Technologies Inc.

Whether the investigator is seeking to identify suitable managers, to compare current managers to others in their peer group or just education, these programs offer substantial help.

When evaluating this software, the key considerations are:

- The universe covered should be extensive, allowing for a real choice of alternatives.
- Performance data should extend back as far as possible.
- Data should be verifiable.
- The program should either allow for easy data manipulation to suit the investigator's criteria or be downloadable to a spreadsheet program for the same purpose.
- Additional managers whose performance is known should be easily added to the data base for comparison with those supplied.
- Performance data should be clearly identified by type of portfolio and whether it is portfolio performance of asset class only, unadjusted for the effects of cash.
- Qualitative data should be easily available and searched for on a relational basis. Examples are items such as geographic areas served; minimum account size and fees; errors and omissions insurance; quality of the composite, firm style emphasis, philosophy and investment decision-making process; additions or losses of clients, dollars and professional staff over time; key investment officer information; and other information typically found in a search questionnaire.
- The program should be easy to use, have good quality graphics and be priced to offer good value.

The first program we'll look at is Burlington Hall's LaPorte Asset Allocation System, which also should have "manager search and evaluation" in the title.

LaPorte is two complete packages in one. It starts with a powerful manager screening section that allows for the maximum in flexibility. It is available as a bare-bones product into which users can load their own data on managers of all types.

Alternatively, users can purchase one or more of three different data bases offered by Burlington Hall: 2,600-plus mutual funds from Investment Company Data; more than 250 commodity pools and advisers provided by Managed Account Reports; and 400-plus investment advisers with 800 portfolios provided by Higgins Associates of Cambridge, Mass.

Most of the advisers are independent firms, but there is a good sprinkling of banks and insurance companies. The portfolios include equity, balanced, fixed income, international equity and fixed income as well as real estate managers. The mutual fund and commodity data are monthly, while the investment advisory firms report quarterly.

For comparative purposes, the mutual fund data can be converted to quarterly and imported to the same report as the others. All performance files can be exported to a spreadsheet.

The program offers intelligent methods for sorting managers, allowing breakdowns by any combination of relative universe ranking, absolute performance, alpha, beta, Sharpe ratio (measure of the added return gotten for each added measure of risk taken), minimum account size, style and more over any chosen time frame.

A significant strength is LaPorte's ability to import local companies for which data can be made available to the user but is missing from the extensive data base. The major criterion for inclusion in the Higgins data base provided to Burlington Hall is the acceptance by the manager of minimum accounts of $5 million or less.

LaPorte doesn't have a performance module, which would allow time-weighted performance calculations on an existing portfolio. But performance can be compared to a user-defined universe if the advanced features option is purchased.

Universes are created on the fly by the program and can be as broad or specialized as desired.

For example, mutual funds can be compared, graphically, to the mean Sharpe ratio of all bank, insurance company and independent managers over several running three-year periods as well as the latest year and eight years. Each fund's differential in Sharpe ratio can be plotted within a universe floating bar, and the major percentile ranks can be specified below a graph.

None of the other programs examined will allow this kind of flexibility in graphics or numerical analysis covering multiple types of managers — such as commodity pools, real estate bank pooled funds and insurance company fixed-income managers — in one fell swoop.

The program's own graphics can be customized even further by a seamless interface into Harvard Graphics.

On the asset allocation front, the program performs quite well. Using the Markowitz model — which seeks the optimum combination of assets to minimize variances of return for a given return level — the user can select individual investments or choose among 40 indexes to optimize based on past performance or independent choices of risk, return and correlation forecasts. Single or multiple constraints can be specified. Graphics are high quality, and the reports can be customized.

Although historical manager analysis is based on actual data, future estimated performance is derived from a random selection of past performance, assuming a log normal return distribution. Holding periods may be set from one to 99 months.

The data provided go back to 1978, but the program will accept up to 50 years of user-specified data, a particularly useful tool for looking at long-run risk premiums.

The program also includes a word processing capability to generate customized letters by pulling performance, risk tolerance and asset allocation data from the studies being run and integrating them in the body of the letter for up to 10 participants at a time. This can be particularly useful for advising participants in a 401(k) plan, where each person has a different risk tolerance.

The program has some shortcomings, particularly in the qualitative area of manager evaluation. The manager data base is not as extensive as some might like and includes some money managers with a mixture of hypothetical and actual performance not clearly identified as such. Background information on the managers is limited and insufficient for due diligence.

Although menu driven, the program is awkward to learn but simple to use. Add unlimited technical support from LaPorte and the program becomes a very powerful tool with extreme flexibility.

The program will run on any IBM PC with DOS 3.0 or above but can be aggravatingly slow unless the system has 80286 or 80386 microprocessor with math chip.

Fast hard drive access time also is recommended. The program uses three megabytes of storage, while the mutual fund and investment adviser data can each take as much as 10 megabytes more.

LaPorte's basic price is $1,975 annually, with the advanced feature option adding $1,000. Mutual fund data cost $695 annually. Investment manager data cost $2,500 per year, and commodity pools are $195 a year. Commodity trading adviser data also is available for $6,000 a year.

LaPorte is not a consultant in a box, but it's a good starting point. ■

This is the first of a series evaluating personal computer software packages designed for manager selection and performance and asset allocation. The software was evaluated — and the series written — by Stephen L. Kessler, a broker-consultant with Dain Bosworth Inc. in Bellevue, Wash.

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Richard Oberuc, president

U.K. funds still shunning real estate, fixed income

GREENWICH, Conn. — British pension funds have reduced their allocations to fixed income and equity real estate investments in the past year and expect to reduce them further by 1993.

During the next three years, however, the U.K. funds expect to boost their non-U.K. equity investments by 4.4 percentage points to 24% of assets.

The latest Greenwich Associates survey of U.K. pension funds shows they reduced fixed-income commitments to 8.5% of assets in 1990 from 10.1% in 1989 and 12.8% in 1988.

U.S. pension funds, by contrast, have 35.3% invested in fixed-income securities, according to Greenwich Associates.

The real estate equity commitment of U.K. pension funds dropped to 10% in 1990 from 11% in 1988, and is expected to drop further to 8.7% of assets by 1993. Rodger Smith, partner at Greenwich Associates, said the real estate equity commitment once was as high as 20%.

The rate of return expectations explain the reduction in real estate investment, Mr. Smith said. "They expect 10% from property, more than 10% from the short-term money market, and considerably more from other types of investment, such as equities.

"But while the reason may be evident, we wonder whether it is mainly a reflection of pessimism about the short-term outlook for property, as opposed to the kind of long-term view pension schemes need," Mr. Smith said.

Global asset mix

Type of investment	U.K. assets	U.S. assets	Canadian assets
Domestic equities - active	45.3%	29.3%	28.7%
Domestic equities - passive	8.6	14.1	2.7
Domestic fixed-interest securities	9.6	35.3	35.9
Overseas investments	21.0	3.7	8.9
Real property	10.0	5.2	10.0
Cash/short-term investments	5.4	6.9	6.5

Note: Percents are pound weighted
Source: Greenwich Associates, Greenwich, Conn.

Despite the declines in allocations to fixed income and real estate equities, U.K. pension funds remain the most diversified among the pension systems studied by Greenwich Associates.

For example, 96% of U.K. pension funds are investing outside the United Kingdom compared with just 36% of pension funds in the United States. In addition, half of the U.K. pension funds invest in venture capital, a far higher percentage than in the United States.

The U.K. funds have, on average, 21% of their assets invested outside of the United Kingdom, and expect that to rise to 25% by 1993. U.S. funds, on the other hand, have only 3.7% of their assets invested outside the United States. Canadian funds have 8.9% invested outside their country, close to the current limit of 10% set by law.

Indexing is growing more slowly in the United Kingdom than in the United States, according to Mr. Smith. Indexing of U.K. equities among pension funds actually declined to 8.6% of assets in 1990 from 9.1% in 1989, the Greenwich survey shows.

The reason, according to Mr. Smith, is partly because indexing fees in the United Kingdom are four or five times higher than indexing fees in the United States. "There are two frictional drags on matching an index — transaction costs and fees; with fees high, there's no way an index fund can keep up with the index it follows," he said.

While U.K. pension funds are diversified across asset classes, they might not be diversified sufficiently within asset classes, Mr. Smith said.

The number of managers used by the average British pension fund has increased to three from 2.3 seven years ago, but 54% of the fund still use only balanced managers, 13% use only specialty managers and 28% use both balanced and specialty managers.

Among the very large funds, however, those with assets totaling more than $1.9 billion, 39% use specialty managers only and 17% use balanced managers only.

While 13% of all funds expect to hire a specialty manager, only 8% expect to hire a balanced manager.

A greater percentage of U.K. pension funds than U.S. or Canadian pension funds uses consultants.

In the United Kingdom, 79% of funds use consultants compared with 61% in the United States and 51% in Canada.

Pension fund executives in the United Kingdom earn less than their U.S. or Canadian counterparts. The average salary in the United Kingdom was $64,860 in 1990 compared with $81,216 in the United States and $79,524 in Canada

An about-face for FDIC

Chairman questions pass-through coverage for BICs

By Fred Williams

WASHINGTON — The heat is on bank insurance contracts, even as issuers double their share of the guaranteed investment market.

In a significant change in direction, FDIC Chairman L. William Seidman questioned the continuation of pass-through coverage for BICs.

"It is time to consider changing the law," Mr. Seidman said in written testimony to the House Committee on Banking, Finance and Urban Affairs.

"The (Federal Deposit Insurance Corp.) might be moving toward becoming the insurer for the nation's pension programs," said Mr. Seidman. "The public policy implications of this . . . are not attractive, and the risk inherent in the current situation suggest limitations are in order."

In a preview of the Bush administration's position on deposit insurance Treasury Undersecretary Robert R. Glauber, testified that limitations on pass through insurance may be required.

He said deposit insurance reform "requires careful consideration of limitations on 'pass-through' accounts, including brokered deposits, pension plan investments, and bank investment contracts."

"These accounts all share the ability to attract massive amounts of funds into the umbrella coverage of the federal safety net," he said, which suggests the need for limiting the number of insured $100,000 accounts.

L. William Seidman thinks the law on pass-through coverage may need to be changed.

The Treasury Department's deposit insurance study is expected to offer a comprehensive review of the deposit insurance program and recommendations by the end of 1990, said Mr. Glauber.

Mr. Seidman's comments came only days after Rep. Henry B. Gonzalez, chairman of the House Banking Committee, said pension funds should not be entitled to receive federal insurance of $100,000 per participant (*Pensions & Investments*, Sept. 17).

And at the same time, Senate Banking Committee Chairman Donald W. Riegle Jr., D-Mich., announced plans to introduce a deposit insurance reform bill designed to help resolve problems of federally insured depository institutions by strengthening capital levels, recapitalizing where necessary, and bringing banks under tighter regulatory scrutiny.

BIC market leaders

BankAmerica
Bankers Trust
Chemical Bank
Citibank
First Chicago
Manufacturers Hanover
Morgan Bank
Union Bank of Finland
Union Bank of Switzerland
Yasuda Trust
SeaFirst
Washington Mutual

The Senate proposal also includes provisions strengthening the Financial Institutions Reform, Recovery and Enforcement Act in the area of brokered deposits and other deposits such as BICs.

According to a Banking Committee statement, Sen. Riegle's bill "strengthens and expands FIRREA's restrictions on brokered deposits, which prohibited troubled institutions from accepting brokered deposits without FDIC approval. While FIRREA covered only deposit brokers and money desks, the bill also will cover other entities that make large deposits in an agency capacity (e.g. mutual funds and pension funds) and receive $100,000 in deposit insurance coverage for each investor."

The apparent shift by the FDIC came as a surprise to insurance and banking industry officials gearing up for another legislative effort to remove pass-through coverage from BICs.

Gary Hughes, chief counsel at the American Council of Life Insurance, said Mr. Seidman's statement "undoubtedly is one of the most significant developments yet."

Hugh Forcier, partner in the Minneapolis law firm of Faegre & Benson and representing Washington Mutual Savings Bank, Seattle, a leading BIC issuer, said Mr. Seidman's comments "represent a change from what he said previously."

He said it is unclear what the impact of the change will be in view of current legislative efforts to reform deposit insurance.

"It could be that he wants to put into law what they found to be the fact, that people have been saying only the most creditworthy institutions' BICs are being purchased . . . and that to have pass-through insurance you may have to be rated as investment grade. We don't know what he means at this point," Mr. Forcier said.

The flurry of activity and attention being given to the banking industry and pass-through coverage on BICs comes as new research indicates bank contracts in force doubled from 1988 to 1989.

In what might be the first comprehensive study of the BIC industry, commissioned by the ACLI to describe the scope and nature of bank activity, the survey found the volume of outstanding BICs to be approximately $13.6 billion at the end of the first quarter of 1990.

That represents about 8% of the $175 billion guaranteed investments at the time, and is double the 4% BIC market share in 1988 when the total was nearly $150 billion.

According to the survey, the BIC business is concentrated in about a dozen banks, with five issuing 64% of the total and another five issuing 14%.

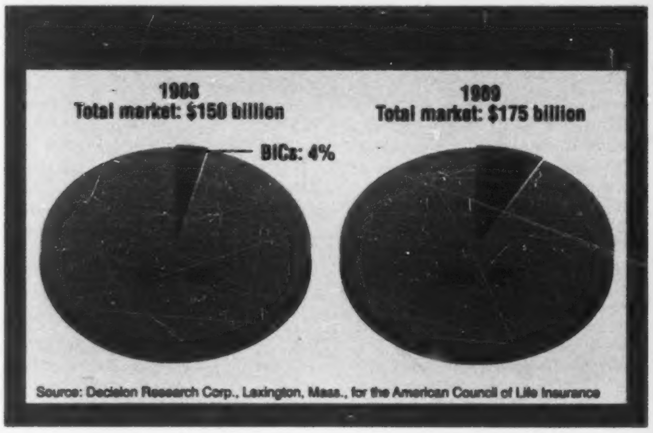
The survey found most high-credit banks claim pass-through coverage "has no effect on their marketing" and matters only to some of the smaller banks that are not major issuers.

"Bankers reported that sophisticated (plan) sponsors have become increasingly aware that the creditworthiness of the issuing institution is much more important than FDIC coverage," the report said.

Bankers also said if FDIC coverage were rescinded for BICs, their rates would improve by 15 basis points.

Other major findings in the survey, prepared by Decision Research Corp., Lexington, Mass., which interviewed 40 banks, include:

- The average BIC contract is $10 million to $30 million for larger banks and $1 million to $13 million for smaller banks.
- The average maturity for BICs is three years.
- Banks see the overlap with insurance companies in the three- to five-year range.
- None of the banks has a large staff for BIC operations — the largest was 10 people — but the banks are usually free to draw on other bank resources to construct, sell and service the contracts.
- Three-fourths of respondents said banks would increase their market shares.
- Because bankers see BICs primarily as a source of funding, banks will back away from the market if the rates are not competitive.



Source: Decision Research Corp., Lexington, Mass., for the American Council of Life Insurance

Jason Psome, managing partner with the consulting firm of Brentwood Asset Advisors, Santa Monica, Calif., said while BICs have gained market share so far, the volume has fallen off dramatically this year, primarily because of concerns over the financial problems facing the banking industry.

"We don't see the BIC volume anywhere near where it was last year. In my opinion, banks are doing maybe half what they did at this same time last year," said Mr. Psome.

"The reason is the stigma attached to domestic lending at the commercial bank level, particularly in the deterioration of the domestic real estate market."

"It's not that we feel the banks are in any way in danger of failing, it is just why lose sleep over it when you can buy an AAA insurance carrier whose rate is likely to be better anyway." ■

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Commissions

Continued from page 2

kerage commissions, and most frequently use them to purchase consulting services (42.4%) and information and research services (25.6%). Pension executives directed 25% of their commissions in 1989, up from 10% in 1987, Callan found.

Also, use of commission refund programs, which rebate hard dollars to pension plans, has soared in the past two years. More than 30% use such programs, up from 16% at the end of 1987.

Clearly, the Callan survey suggests pension executives do not think trading costs are very significant. Only 17.4% of pension executives believe pension fund directed brokerage harms money manager performance. In dramatic contrast, 63.2% of managers think their performance is hampered by trades directed by pension executives.

Fred G. Weiss, vice president-planning & investment development, Warner-Lambert Co., Morris Plains, N.J., doesn't believe performance is hampered. In fact, that's what money managers have told him. "Every money manager swears up and down that (directed brokerage) won't affect performance."

Callan officials suggest managers might be using trading costs as a scapegoat for why their strategy or style has underperformed the market in recent years, or might be subject to brokers "talking up" transaction costs.

Also, managers lose out when they have to share a portion of the soft dollars with pension executives, an increasingly common practice. Managers might be trying to keep more of the soft-dollar pie, Mr. Brunke suggested.

Callan officials admit pension executives are further removed from the trading process, and aren't likely to increase their scrutiny of soft-dollar costs short of additional regulatory pressure.

Some investors do think directed brokerage can harm investment performance. Of those who do, 64.1% of pension executives and officials of managers believe poor execution impairs returns.

Pension executives think average performance will suffer 16 basis points, lower than 23 basis points two years ago, while managers believe performance will decline 25 basis points, down sharply from 40 basis points.

Despite the impact on performance, most pension executives and money managers examine commission costs only instead of total transaction costs, which include market-impact costs of executing trades. Market-impact studies used by both plan sponsors and managers frequently indicate execution costs are far cheaper than commission costs.

Callan's survey, for example, reveals median and mean market impact costs for pension executives of 1 cent per share and 2.6 cents per share, respectively — well below the levels of 6 and 6.6 cents per share cited for commission costs. Pension executives reason, "If it's only a penny or two, why should I measure it," Mr. Brunke said.

The existing measurement systems dramatically understate the costs of trading, said Ted Aronson, partner, Aronson + Fogler, Philadelphia.

Market-impact costs are hard if not impossible to measure, and thus most people throw up their hands, experts agreed. The difficulty in nailing down those costs create justification for pension executives to simply ignore total transaction costs, and focus just on commissions.

But "when everybody gets together, off the record, everybody agrees that trading costs are high," Mr. Aronson said. "It's just very, very expensive to trade."

Mr. Birinyi argued market-impact costs alone run in the neighborhood of 150 basis points-plus a year for actively managed equity accounts. Mutual funds lagged the Standard & Poor's 500 Stock Index by 580 basis points in 1989, he noted. "It can't all have been bad stock selection."

Alan Lebowitz, a deputy assistant secretary in the Labor Department, said the department requires pension executives to examine the reasonableness of fees and commissions charged to plans, but he acknowledged it is hard to measure execution costs. "Clearly, execution is an important part of performance," he said.

Yet pension executives and managers alike have incentives to retain directed brokerage and soft-dollar trades. Services purchased with soft-dollar credits or rebates do not show up on corporate budgets.

"Plan sponsors think they are getting a free ride," said Charles Stephens, president of the National Sponsor Investment Federation and director of investments for the United Mine Workers of America Health & Retirement Funds, Washington.

Pension executives "attempt to use soft dollars as off-balance-sheet financing," Mr. Stephens said. "It's buying them off with their own money."

But without added regulatory pressure, few experts believe directed brokerage or soft dollars will disappear, although there are a few signs the market is moving toward unbundling commission costs.

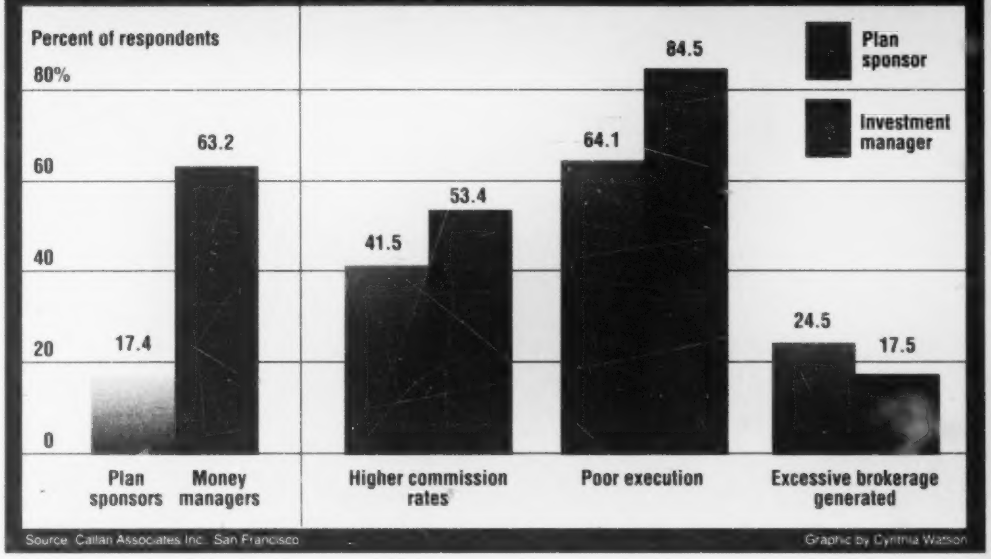
Despite lowering of commissions in recent years, the Callan survey found 42% of pension executives and 37% of managers believe the brokerage industry is overcompensated relative to the added value it provides. What's more, investors expected a 10% reduction in median trading costs this year when market-impact costs are considered.

Pension executives also are far less concerned about lack of liquidity in the market than managers. Nearly four-fifths of pension executives think there is adequate liquidity, compared with 53% of money managers.

Roughly 80% of both pension executives and managers do worry, however, that index arbitrage, a form of program trading, has increased stock market volatility. Only 20% of pension funds permit such trades, while 45.7% of pension executives and 50.3% of managers believe pension funds should not be allowed to use any form of program trading. ■

Does directed brokerage harm manager performance?

Almost one-fifth of plan sponsors and two-thirds of money managers surveyed thought directed brokerage harms investment returns. The chart on the right shows the areas respondents thought were affected.



Source: Callan Associates Inc., San Francisco

Graphic by Cynthia Watson

Deficit

Continued from page 1

is a base rate of $16 per participant charged to sponsors of single-employer plans, but companies with underfunded plans can pay up to $50 per participant.

The $65 million increase means the variable-rate ceiling could go to $70 per participant, Mr. Lockhart said. "We don't want to punish the well-funded plans any."

But the PBGC likely will meet stiff opposition on this front. Congressional Democrats will want the burden of an increased premium to be spread among all single-employer plans, and not fall mostly on the weakest ones, congressional sources said. A flat increase of $2 per participant has been discussed.

The $65 million figure originated from proposed closing of loopholes in the PBGC program urged by Office of Management Budget Director Richard Darman. Those reforms, which include bankruptcy-law changes, were relegated to a study, but the $65 million figure remained intact, one source said. Thus, budget negotiators will have to turn to the PBGC premium for the new revenue.

Business lobbyists, however, oppose any further increases in the PBGC premium, after major boosts in 1986 and 1987. "I do not believe there's any indication that a premium increase is necessary in any way, shape or form," said Mark Ugoretz, president of the ERISA Industry Committee, Washington.

Meanwhile, Congress was trying to hammer out a deal to permit employers to transfer surplus pension assets to retiree health plans while restricting reversions from terminating plans.

Revenue from retiree health transfers are key to that proposal's inclusion in the budget. Because employers would be permitted to make transfers of surplus pension assets to retiree medical accounts, it would — in the short run — decrease their deductions for paying out those health benefits.

Sources said Congress is focusing on a transfer proposal approved by the Senate Finance Committee last year that would permit the transfers for five years — far more generous than the one-year experiment proposed by the Bush administration earlier this year. The five-year proposal would raise $2.05 billion in revenue during the period, according to last year's estimate.

The major issues under discussion include where to set the "cushion" of assets employers would have to keep in a pension plan when a transfer is effected, which would have a major effect on how many dollars could be shifted. Proposals for the cushion range from 125% to 150% of termination liability.

Also, legislators are considering whether to permit transfers up to the entire retiree medical liability for current retirees only, or to limit the transfer to one year's worth of retiree benefits.

In exchange, new restrictions on asset reversions from terminating plans would be imposed. Democrats, led by Sen. Howard Metzenbaum, D-Ohio, and Rep. Bill Clay, D-Mo., have insisted any retiree medical transfer proposal be tied to tougher rules for asset reversions. Sources said the pair have the support of congressional leaders.

Proposals under discussion include increasing the excise tax on reversions to 20% from 15%, and requiring 30% of a terminated plan's excess assets be placed into a replacement plan or given directly to participants. If only 20% of surplus assets were held over, employers would have to give a portion to retirees, under one proposal.

In addition, retirees would be required to be participants in the new plan, even though their benefits had been annuitized, as a way to increase their chances of receiving cost-of-living adjustments. But that would force employers to pay premiums to the PBGC for those retirees. Premiums now do not have to be paid for participants whose benefits have been annuitized.

Even if an agreement of asset reversions and retiree medical transfers cannot be worked out in time, some experts believe an increase in the excise tax will occur, perhaps to the 20% to 30% range.

A recent report by the General Accounting Office said a 39% rate would be justified, while Rep. Peter J. Visclosky, D-Ind., has proposed doubling the excise tax to 30%, as part of a bill that would liberalize full-funding limits.

Meanwhile, the PBGC is seeking a whole host of reforms to the bankruptcy law and pension law, reflecting in part its experiences in dealing with The LTV Corp. and Eastern Airlines Inc.

Eastern's seven plans were terminated two weeks ago under an agreement by which Eastern will chip in $30 million and give the PBGC a $565 million unsecured creditor claim while parent Continental Airlines Holdings Inc. contributed $80.5 million and agreed to cover the plans' remaining pension liabilities. The PBGC estimated Eastern's unfunded pension liability at $720 million.

In a speech to the International Foundation of Employee Benefit Plans in Chicago, the PBGC's Mr. Lockhart fleshed out ideas on what reforms are needed by the agency, which has a $1 billion deficit. The PBGC is expected to unveil a legislative package early next year.

Mr. Lockhart said the agency's "long-term objective must be to operate as a service-oriented, professionally managed insurance company — one that could achieve a stand-alone AAA rating." Critics argue the PBGC is not an insurance company, however, but a social insurance program.

Mr. Lockhart called for switching to more of a risk-related basis for assessing premiums, so companies such as General Motors Corp. — with some unfunded pension liabilities but in otherwise good financial health — would not be slapped with excessive premiums. He said the cross-subsidy from well-funded plans to underfunded plans "may be as high as 50% of total premiums, or about $300 million."

Mr. Lockhart also suggested charging a supplementary premium for contingent benefits such as plant shutdown benefits, which are guaranteed by the agency once they are implemented but are not prefunded by employers. Alternatively, he said "a tighter limit" could be placed on those liabilities.

Plant shutdown benefits have accounted for about one-fourth of the agency's $4.2 billion in liabilities.

In addition, Mr. Lockhart said minimum funding rules should be re-examined and he made several bankruptcy law recommendations, which likely will run into trouble with congressional judiciary panels.

He urged adopting a higher status for the PBGC in bankruptcy situations, requiring employers to continue to make pension contributions while in bankruptcy proceedings, and creating a mechanism to permit the agency to obtain recoveries from a troubled company without resorting to plan termination. ■

Staff reporter Curtis Vosti contributed to this story.

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AT DEADLINE

ESOP suit withdrawn

The Department of Labor has withdrawn a controversial lawsuit that threatened the viability of many leveraged ESOPs. No reason was given for the decision to withdraw the department's complaint in Dole vs. Farnum.

Philadelphia cuts Trinity

Board members of the Philadelphia Municipal Retirement System have voted to take back a $99 million account that was managed by Trinity Investment Management Corp. because of poor performance. The investment had been made through Frank Russell Trust Co., which was acting as a manager of managers.

Lohrer quits Northrop

Richard B. Lohrer, vice president-trust investments at Northrop Corp., will take early retirement at the end of this month. His duties will be assumed by Rose Mary Abelson, director-trust administration and investment. Mr. Lohrer has run the $4.1 billion Northrop plans for 16 years and intends to remain involved in the pension field.

LBO commitments dive

Total funds committed by banks to leveraged buy-outs, acquisitions, recapitalizations and other highly leveraged transactions have plummeted 37% from last year, according to Oppenheimer & Co. In 1989, banks committed $57.6 billion; so far this year they have committed $30.7 billion.

Profit slide predicted

Corporate profits likely will slide about 8% in 1991, according to Salomon Brothers.

The investment bank says a recession and high financial and operating leverage will depress earnings by more than in past recessions, after essentially level profits in 1990.

INSIDE

Retail returns in trouble

A drop in consumer spending — brought on by the soaring price of oil and likely increases in federal taxes — would dampen the returns from institutional investors' retail property investments. Page 3

3 pension problems in budget bill

Congress expected to keep proposals

By Joel Chernoff

WASHINGTON — Pension executives might face a triple dose of bad news in the federal budget-reconciliation bill being negotiated on Capitol Hill.

Three major proposals have surfaced in the budget package now being assembled in Congress:

- Premiums paid by employers to the Pension Benefit Guaranty Corp. are likely to increase. Congress wants to raise $120 million a year in new revenue from premiums covering single-employer pension plans — nearly twice the $65 million increase proposed earlier.

Under the provision approved by the House Ways and Means Committee last Wednesday, the base rate charged to all plan sponsors would increase to $19 per participant from $16. Meanwhile, the variable rate, which is charged only to sponsors of underfunded plans, would rise to $9 per $1,000 of underfunding, from $6. The maximum that could be charged on the variable rate would rise to $53 from $34. The changes would go into effect next year.

In sum, that means the worst-funded plans could be charged a maximum premium of $72 per participant — a 44% jump from the current ceiling of $50. Sponsors of well-funded plans face an 18.75% increase.

- Provisions on the transfer of surplus pension assets to retiree medical accounts will be far tighter than most experts had hoped, greatly limiting the desirability of such transactions.
- New restrictions on reversions of surplus assets from terminated pension plans — the price extracted by congressional Democrats for permitting retiree-medical transfers — likely will bring to an end the desire of most employers to recoup excess pension assets. One proposal basically would tie up half of the surplus, before income taxes are deducted.

"It's a bad deal," said John J. Gish, assistant to the treasurer at W.R. Grace & Co., New York, referring to the acceptance of permanent restrictions on asset reversions for the limited ability to effect retiree-health transfers.

The proposal is "either confiscatory or very costly," said John Bohan, vice president-pension investments, The Pillsbury Co., Minneapolis.

While congressional committees were meeting late last week to hammer out budget provisions, most experts expected the pension-law changes to remain largely intact from the previous budget measure that went down in flames in the House a week ago.

The pension provisions all raise federal revenue and are overshadowed by major battles over cuts in the capital gains tax rate, Medicare changes and hikes in taxes for the wealthy. The retiree-health transfer and asset reversion changes are expected to raise $500 million in 1991 and

See **Budget** *on page 60*

Partnerships seek to raise $8.6 billion

By Marcia Parker and Marlene Givant Star

If buy-out firms, boutiques and investment banks reach their targets, more than $8.6 billion from institutional investors will be available for private capital infusions in companies.

The California Public Employees' Retirement System, the Massachusetts Pensions Reserve Investment Management Board, the Colorado Public Employees' Retirement Association and the pension funds of American Airlines Inc., Delta Air Lines Inc. and General Electric Co. are among the institutions that have funneled more than $3.5 billion this year into these new-age partnerships.

Fund-raisers hope to attract at least another $5.17 billion for privately placed debt and equity in companies. Even if these groups don't raise their full target amounts — and many institutions think that not all of them will — the private market clearly is destined to become a far bigger source of capital for companies. And these providers of private capital will have more influence over companies.

Moreover, the partnerships are evolving into true joint business ventures between the general partners and their institutional partners. Some partnerships have set up or are considering setting up advisory boards whose members include institutional partners. A few have begun inviting institutional partners to meetings with the top executives of the portfolio companies.

See **Private** *on page 61*

Photo by Margaret Price

The opening of the gateway to the east brings with it a slowdown in pre-funding German pensions.

Unification slows pre-funding

By Margaret Price

The unification of Germany is expected to slow the development of partially funded pension arrangements in the country.

Western Germany's time-honored book-reserves system of providing for pensions is expected now to spread to eastern Germany, helping to provide the capital needed to rebuild the former communist nation.

This demand for investment capital is helping slow the growth of special, segregated funds, which some German companies had established to back their pension promises.

The book-reserves system of keeping tax-deductible pension contributions inside the company and showing a liability to the pension plan on the company's balance sheet, contrasts with the systems in the United States and United Kingdom, which segregate pension assets from a company's working capital. Some experts say West Germany's book-reserves system aided the country's post-World War II economic boom.

The book-reserves system might well prove beneficial again. Some experts believe it should not only help bolster companies in eastern Germany, but also could give western Germany-based firms a financial advantage in buying, or investing in, eastern Germany.

Of course, pension issues aren't now paramount in Germany. Amid today's early phases of privatization in the former East Germany, which previously had a state social security system, German business executives have to grapple with such basic issues as rebuilding, profit-making and productivity enhancing. Investment has not yet been substantial in eastern Germany. But in time, after basic business problems are addressed in the east, companies will consider such employee benefits as pensions. At that point, consultants agree, the book-reserves pension system will be embraced.

In the aftermath of unification, "book reserves will be used even more than they have been," predicted Alf Gohdes, manager of the Munich office of The Wyatt Co. As he pointed out, "the system saves liquidity for a company."

In western Germany, most companies have long relied on the book-reserves system. Other tax-advantaged options often have

See **Germany** *on page 62*

NEWS DIGEST

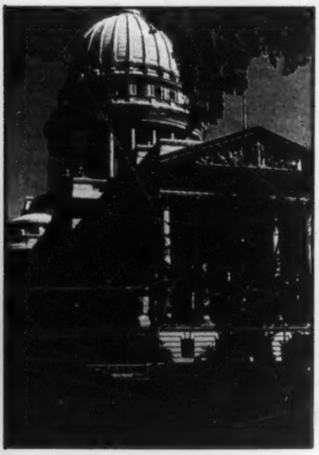
Photo by Tim Berger

Charges of outside influence over the Wisconsin State Investment Board have become an issue in the race for the state's highest office, with the Democratic gubernatorial challenger claiming those doing business with the board also are contributors to the Republican incumbent's campaign. Story on page 57.

Minority- and female-owned management firms that are participants in three commingled vehicles are getting more than $300 million from a broad cross-section of U.S. pension funds. Page 35.

SPECIAL REPORT: FOREIGN EXCHANGE

Household International Inc. places a high priority on its pension fund's currency hedging program. Page 21.

Currency options are valuable instruments that offer real protection for companies in today's global economy, a currency trader says. Page 21.

FINANCING

Institutional investors are being asked to invest billions of dollars to fund private capital infusions in companies. Page 1.

Mortgage- and asset-backed debt securities issues are booming despite the threat of inflation and a shortage of oil. Page 55.

INTERNATIONAL

West Germany's traditional system of providing for pensions to its workers is expected to spread with the German unification. Page 1.

The Soviet Union is being urged to issue ownership shares in government-run companies to hasten its transition to a market economy. Page 19.

REAL ESTATE

Pension funds are taking a harder look at growth and vacancy projections before pouring assets into real estate investment decisions. Page 26.

Turning around distressed hotel properties has gained more than just a passing interest of two corporate pension funds. Page 44.

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Record-keeping survey has begun

Pensions & Investments is conducting a survey of defined contribution plan administrators. Questionnaires have been mailed for the directory, which will be published in the Dec. 10 issue. The deadline is Nov. 2. If you have not received a questionnaire and wish to be included in the directory, please contact Sabine Schramm at (312) 649-5407.

3M eyes currency strategy

Firm learns how hedging affects entire business

By Marlene Givant Star

ST. PAUL, Minn. — Minnesota Mining & Manufacturing Co. is exploring an uncommon strategy of currency management of whole operations instead of specific transactions.

Known as "economic hedging," the process was pioneered by Eastman Kodak Co. and is attracting the interest of a few very large corporations. Merck & Co. Inc., Monsanto Co. and Dow Chemical Co. are applying economic hedging to varying degrees.

Economic hedging addresses how currency movements will affect an overall business, allowing corporate managers to decide how to use exchange rates and the foreign exchange market to compensate for that impact or determine whether they need to adjust the underlying business to withstand the impact. For example, a manager might incorporate currency considerations into the timing and location of a plant or equipment investment.

"We're getting a little closer to some of our businesses, working with them to identify competitors and develop currency strategies based on the overall business rather than just their transactions," said David Fellner, 3M's manager of currency and financial management.

3M has four business areas — industrial and electronic; commercial and consumer; information and imaging technologies; and life sciences. 3M executives have been cultivating their currency expertise since the mid-1970s, long before most other corporations began examining foreign exchange risk.

"Our approach to currencies is on a smaller scale but no less sophisticated than more aggressive corporate treasuries," said Dennis Durst, financial risk manager responsible for in-house currency trading and interest rate management.

Investors explore foreign exchange tactics. Page 21.

Bucking tradition is nothing unusual for 3M, which also is one of the few companies that not only internally manages the currency exposure of its corporate operations but also that of its pension plan. 3M even manages small global bond portfolio i house, another rare endeavor for corporate pension fund.

The $2.73 billion defined ben fit fund had $157 million — i cluding $135 million in equities invested overseas as of Sept. 3 1989 (*Pensions & Investment* Jan. 22).

The currency and interest ra management department operat like a little company whose ve existence depends on its contrib tion to the corporation's botto line. The group is aggressive in use of options and plans to boo interest rate management in add tion to its study of econom hedging.

3M views economic hedging a way of "helping our divisio understand where their exposur are, structuring their business so they don't have to be qui asconcerned about exchang rates," Mr. Fellner said.

Eastman Kodak, which like 3 has close to 50% of its sales ove seas, pioneered economic hedgi three to four years ago. The com pany adopted it as an official po icy in the spring of 1988, accor ing to David Fiedler, director

See **Currency hedge** *on page*

Pension changes cost Ford

By Trudy Ring

DEARBORN, Mich. — Pension improvements negotiated in the United Auto Workers' new contract with Ford Motor Co. will increase Ford's current service cost between 15% and 20% for the three-year life of the contract, according to actuarial estimates.

The improvements also will increase the company's projected benefit obligation, with the size of the increase hard to determine.

A summary of the agreement presented by the UAW to its members does not, however, say what the improved benefits will cost the company. Company officials declined comment.

Gerry Bell, partner and actuary with Kwasha Lipton, Fort Lee, N.J., said the total compensation increase appeared to be between 6% and 8%; the increase in pension expense would be difficult to pinpoint, he said.

The tentative agreement, which has yet to be ratified by workers, provides for pension improvements that are similar to those r cently negotiated in the patter setting agreement with Gener Motors Corp. (*Pensions & Inves ments*, Oct. 1). Ford workers a

See **Ford** *on page*

Ford Motor's pending contract with UAW workers would increase Ford's projected benefit obligation and current service cost.

Fund caps realty advisers' fee

By Steve Hemmerick

SACRAMENTO, Calif. — The California Public Employees' Retirement System expects to save hundreds of thousands of dollars by setting upper limits on what its real estate advisers can charge in annual asset management fees.

The move is in keeping with pension executives' attempts to lower real estate money managers' fees.

Trustees for the $57 billion fund made the decision after becoming convinced that standard asset management fees resulted in their paying excessive amounts on their $2.3 billion real estate portfolio.

The maximum fees, which can save as much as an estimated $525,000 each year for just one $150 million property, are effective in April, when the fund's real estate advisory contracts expire.

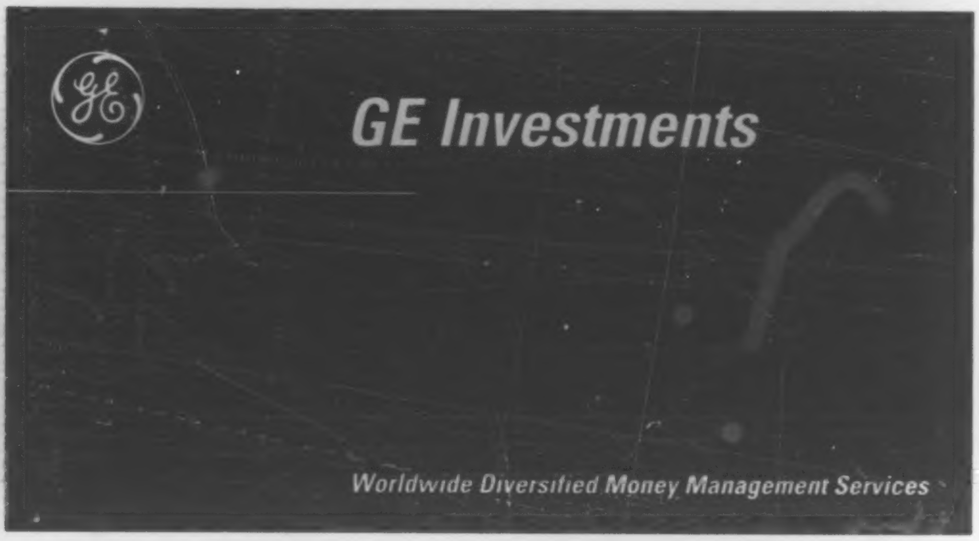
Fee caps could be used on at least 23 properties with values between $50 million and $200 million.

To begin the contractual pr cess, the retirement system r cently sent out bid requests more than 100 real estate adviso firms, including the six wit which it now has contracts.

The new contracts stipulate a visers can charge no more tha $500,000 in asset manageme fees for each building, plus a 2 basis-point fee on the amount of property's value over $100 mi lion.

In effect, the new fees establis

See **Fees** *on page*



U.N. chief named

By Margaret Price

NEW YORK — Henry Ouma, formerly deputy chief-investment management service of the $9 billion United Nations Joint Staff Pension Fund, has been promoted to chief of the service — the position that had been vacated by Pierre Henchoz.

Mr. Henchoz left the U.N. Aug. 31 to become chief investment officer of Hentsch, Chollet & Cie, a private bank in Lausanne, Switzerland (*Pensions & Investments*, Sept. 3).

Mr. Ouma officially took on his new role Sept. 1. So far, no one has been named to fill his former slot as deputy chief. But Mr. Ouma said that position probably will be filled late this year or early in 1991.

Mr. Ouma, a native of Kenya, joined the U.N.'s investment section in 1980 as an investment officer. He had held the job of deputy chief-investment management service since April 1986.

He said no changes are planned for the U.N. fund's investment management, which is handled in-house. The fund has 40% in stocks, 38% in bonds, 11% in real estate and the rest in short-term investments, he said.

The fund will be continuing with plans for its in-house global custody network, which Mr. Ouma said should be operational "hopefully within a year or two" (*P&I*, July 9).

Mr. Ouma's new role allows him to "focus on the broader picture" of the fund's investing, he said. During his tenure at the fund, he had been responsible for different parts of the entire portfolio. For instance, in his past job, he was responsible for equities management in the markets of the Far East, the United Kingdom and emerging markets, as well as real estate. ■

CORRECTIONS & CLARIFICATIONS

• **NCNB National Bank's** master trust/master custody profile was omitted inadvertently from the Oct. 1 directory.

The bank would have ranked 18th among master trust banks ranked by U.S. tax-exempt assets and seventh among banks ranked by new U.S. tax-exempt business gained in the year ended June 30. For the ranking by taxable master trust and custody assets, the bank would rank 13th. The complete profile follows.

NCNB National Bank
1 NCNB Plaza, T10-10, Charlotte,
N.C. 28255; (704) 386-5115

Domestic master trust assets	$22,700,000,000
Tax-exempt	$19,400,000,000
Taxable	$3,300,000,000
Domestic master custodial	$9,300,000,000
Tax-exempt	$1,500,000,000
Taxable	$7,800,000,000
Domestic master trust clients	
Tax-exempt	43
Taxable	8
Domestic master custodial clients	
Tax-exempt	6
Taxable	4
Account supervisors	8

Reports available on-line:
Monthly transaction
Asset & liability
Performance measurement

NCNB National Bank reported new, tax-exempt domestic master trust business of $6.735 billion in the year ended June 30 and new, tax-exempt domestic master custodial business of $2 million.

The primary accounting method is trade date, full accrual. Settlement date and cash or accrual basis accounting also are offered.

Services offered in the basic master trust/master custodial agreement are client on-line reporting and downloading; on-line DTC securities processing; on-line cash management and forecasting; fail float earnings; 150 accounting reports; global custody; plan accounting and reporting; pre-crediting dividends and interest on payable date in good funds; daily pricing; on-line benefit payments and control disbursement; securities lending; options/futures processing; on-line performance measurement and analytics; TUCS; asset allocation and simulation services; on-line investment manager affirmation; on-line cash management sweep services; and on-line institutional custody service.

ESOP and 401(k) administration; government reporting; stock and bond index funds; portfolio risk insurance; GIC wholesale service; dedicated bond portfolios; performance consulting; transition manager service; and international real estate and energy investing are available for additional fees.

Record-keeping services offered include individual participant record keeping.

New features include comprehensive mutual fund daily valuations, expanded trade execution analysis and improved customer reporting.

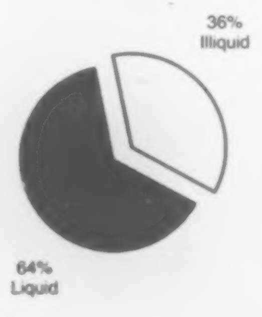
Fees are based on a percentage of market value plus transaction fees.

The contacts are K. Nash Kinney and James C. Rhea.

Finally, a global bond index based on government bonds that actually trade.

By tracking only actively traded bonds, the J.P. Morgan Government Bond Index is the fairest way to measure an investment manager's fixed-income performance. The Index includes only liquid issues in each of 11 markets, providing a daily benchmark for your portfolio performance that is based on reliable prices and is more reflective of actual market risks. With daily market prices and all settlement and interest calculations performed according to individual market conventions, the Index is becoming the preferred benchmark for investor performance in the global bond markets.

Non-U.S. Government Bond Markets
(Liquidity of 10 key markets)



With international bond markets varying widely in liquidity, an investment manager's portfolio can have a very different market exposure from a benchmark that includes illiquids.

For more information on
the J.P. Morgan
Government Bond Index,
call your consultant, or
Sharon O'Connor,
J.P. Morgan Securities Inc.,
(212) 648-0870.

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CAYMANWENT

Photo by Anthony F. Ficke

The Caribbean apparel industry is one of the investment opportunities to be touted at a conference this week.

INTERNATIONAL

Caribbean is dressing for success

■ Like many countries the world over, those in the Caribbean Basin are dreaming up all sorts of clever ways to attract foreign investors.

Besides a sampling of Caribbean food, one of the highlights of a Caribbean Basin Business Conference Oct. 18-20 in San Juan, Puerto Rico, is a Caribbean fashion show. It's designed mainly to showcase the design and quality of the region's apparel industry. Conference sponsors are talking up apparel investment and trade opportunities as well as agribusiness and light manufacturing.

The Caribbean Basin offers foreign investors low taxes, cheap financing, skilled and inexpensive labor, proximity to the United States and transportation links to Canada and Europe.

CORPORATE GOVERNANCE

Push on for independent directors

■ Support is picking up worldwide for stacking corporate boards with more independent directors as a way to strengthen board performance and corporate governance.

Pro-Ned (Promotion of Non-Executive Directors), the non-profit British group that has made independent boards of directors its crusade, is consulting with a similar start-up group in France. Robert Monks, former president of Institutional Shareholder Services, Washington, has talked with Pro-Ned about offering a recruitment service for independent directors in the United States patterned after the one Pro-Ned provides in Britain. The Council of Institutional Investors also is trying to develop a director bank.

Candidates recommended by Pro-Ned fill only a small number of board seats each year, although the use of the service is growing, according to Executive Director Colin St. Johnston. The group is targeting middle-market companies because most of the bigger U.K. company boards — like their U.S. counterparts — already have several outside directors. One difference in its approach, however, is that Pro-Ned believes only a third of the board members should be independent. In the United States, the call is for a majority of independent directors.

Down the road, Pro-Ned plans to offer a European boardroom recruitment service to reflect the increasingly global scope of British companies.

LEASING

Survey finds 11% increase in 1989

■ New leasing business volume increased 11.4% in 1989, a survey by the American Association of Equipment Lessors shows.

The growth, to $41 billion from $36.8 billion in 1988, was due to a boost in direct financing and leveraged and operating leasing.

The association also reported an additional $11 billion in brokered transactions. When brokered and automobile leasing volume is included, total volume swelled to $56.3 billion or an estimated 46% of all equipment leased in the United States in 1989.

Direct financing volume grew 16.6% to $26.3 billion from $22.6 billion and operating leasing volume rose 18% in 1989. Leveraged leasing volume increased 75% to $8.9 billion from $5.1 billion, according to the survey.

More medical, manufacturing and electrical power generation equipment was leased in 1989 than 1988. Medical equipment leasing volume rose to 4.2% from 3.3%; manufacturing leasing volume increased to 6.7% from 5.1%; and electrical power leasing volume jumped to 5.6% from 3%.

Leasing volume fell in 1989 in the computer, aircraft and telecommunication equipment categories. Computer equipment leasing dropped to 19.7% from 21.7%; aircraft leasing dipped to 13.9% from 15.1%; telecommunications leasing declined to 4.6% from 8.3%. Despite the decline, computers and aircraft prevail as the most-leased equipment in the industry, the survey said.

REAL ESTATE

Funds' rush to foreign property at least a year away

■ Many U.S. pension funds are a year to 18 months away from investing in European real estate, one international real estate brokerage executive believes.

Paul R. Dudman, director of Auguste-Thouard/Edward Erdman in London, said many pension executives have expressed interest in foreign realty, but say they first must take care of domestic real estate problems.

Mr. Dudman was one of several foreign commercial brokers — all affiliated with The Office Network, an international brokerage consortium — who discussed international real estate investing with *Pensions & Investments* during a meeting in Chicago.

Ib Gregers Hansen, director of Sadolin & Albaek in Copenhagen, Denmark, suggested U.S. investors consider Copenhagen, where the infrastructure is undergoing major improvements and there is a 2% office vacancy rate. Swedish investors have begun buying up Danish properties, and Mr. Hansen expects the West Germans won't be far behind.

As for foreign investors, Mr. Dudman said to look for increased U.S. property investments by French investors because investment restrictions have eased. Mr. Hansen said Finnish investors also will be looking at foreign real estate because their investment laws have been liberalized, while the Swedes are interested in U.S. markets that are near bottom.

PUBLIC FUNDS

D.C. government makes payment

■ As promised, the District of Columbia has delivered the $55 million quarterly payment which the city delayed making to its pension fund last summer.

The $1.5 billion District of Columbia Retirement Board, which weathered a more than five-week delay in 1988, charged the city 11% interest on its most recent contribution, which was due July 1 and paid Sept. 29.

The payment came just one week after Philadelphia's Mayor W. Wilson Goode announced a plan to defer $90 million in pension payments to the $1.65 billion Philadelphia Municipal Pension Fund.

Both cities are in a state of financial crisis.

The District government has been struggling to make payments as it wages a legislative battle to get increased federal funding. Mr. Goode's decision to defer Philadelphia's pension payment was part of a $142 million plan to stave off the city's bankruptcy until Dec. 1.

New Common Fund executives: Lyn Hutton, left, and Harry Turner.

PEOPLE

Common Fund, firm tap chairmen

■ Lyn Hutton, vice president of finance and treasurer of Dartmouth College, has been named chairman of The Common Fund and Harry Turner, acting treasurer of Stanford University, has been named chairman of Endowment Advisors Inc., a firm founded by the Common Fund.

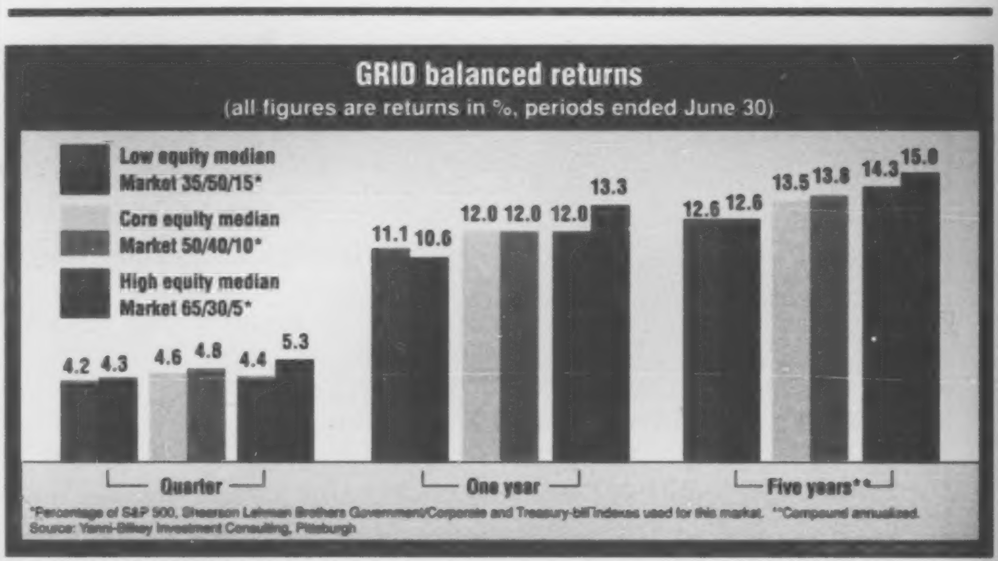
Ms. Hutton assumes her post as the non-profit corporation, which ran $5.6 billion in endowment assets for colleges, universities and independent schools as of June 30, marks its 20th anniversary.

As chairman of Endowment Advisors, Mr. Turner will help shape a $600 million investment program in real estate, energy, private equity and venture capital for more than 200 schools.

Endowment Advisors supervises a group of 12 managers in those asset classes.

GRID balanced returns

(all figures are returns in %, periods ended June 30)



*Percentage of S&P 500, Shearson Lehman Brothers Government/Corporate and Treasury-bill Indexes used for this market. **Compound annualized.
Source: Yanni-Bilkey Investment Consulting, Pittsburgh

PENSION FUNDS

L.A. County fund cashes in adviser

■ The $10 billion Los Angeles County Employees' Retirement Association has decided to end its relationship with its current cash manager, Discount Corp. of New York Advisers, New York.

The firm, however, will continue to run the retirement system's $800 million cash portfolio until the pension fund can select a new manager, said Victoria Treadwell, portfolio analyst with the retirement system.

The retirement system's consultant, Callan Associates Inc., San Francisco, is assisting in the search for a new cash manager. Ms. Treadwell said the change is being made because the retirement system's investment board wants improved performance.

This special directory on minority- and female-owned financial services firms was compiled from questionnaires sent out by *Pensions & Investments*.

Questionnaires were sent to more than 80 financial services firms at which women or minorities hold an ownership interest.

The firms were asked to provide information on services offered; the year the firm was founded; assets under management; investment approaches; special services in the investment banking and brokerage areas; consulting services provided; and personnel and years of experience.

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Putting the trust with a new team

Funds back faith with assets

By Marcia Parker

Corporate, public and union pension funds have invested more than $300 million in three commingled vehicles that showcase the talents of minority- and women-owned money management firms.

These pension trusts, set up by Bankers Trust Co., New York; Evaluation Associates Inc., Norwalk, Conn.; and Progress Investment Management Co., San Francisco, give institutions an alternative to conducting a search-and-hire mission themselves or setting up farm teams. The trusts are managed by a diverse group of minority and female managers selected by the manager of managers, which monitors their performance.

Among the pension funds invested in the three minority trusts are those of American Information Technologies Corp., General Electric Corp., Pacific Telesis Group, The Kroger Co., Champion International Corp., Chrysler Corp., the state of Maryland and Bankers Trust New York Corp.

The pension trusts provide an avenue for emerging managers to demonstrate their abilities, especially to very large institutional investors that can't allocate minimal sums for management by many small minority-owned firms.

But the approach has drawn some opposition.

At a money management conference this summer, Pennsylvania State Treasurer Catherine Baker Knoll criticized the idea, saying only a "chosen few" will be able to gain entry to the market that way, and it might "prevent other firms from getting equitable treatment and from being judged on individual merit."

Her remarks drew support from some minority managers who felt the concept was degrading, while others rejected that thinking.

The "right" approach to the hiring of minority managers has long been debated. Most institutional investors either maintain farm teams of emerging managers or hire individual managers. Until these group trusts were created, the manager-of-managers approach used in other areas of money management hadn't been used to spur the hiring of minority and female managers.

The pension funds of Chrysler, the state of Maryland, San Diego Gas & Electric Co. and Bankers Trust New York are among the first investors in Bankers Trust's Minority Equity Trust. Together the four funds have invested $55 million. The newest investor is a union pension fund, which committed $50 million, bringing the total in the fund to $105 million. But because the final contract hasn't been signed the union fund did not want to be identified. It is the first union pension fund to invest in any of the trusts.

The managers are Amerindo U.S. Advisors Inc., Ariel Capital Management, Economic Resources Corp., Beekman Capital Management Ltd., Gramercy Capital Management Corp. and Greaves Capital Management Inc. Bankers Trust is the trustee.

"It clears up a problem of emerging managers and how they can be retained, especially by large funds"
— Ron Peyton

The consultants are Tremont Partners Inc. and Stamberg Prestia Ltd. Tremont, a New Canaan, Conn., firm whose staff is composed solely of women, specializes in the design of multimanager investment products and is responsible for manager screening and performance analysis. Stamberg Prestia, a Norwalk, Conn., firm owned by women, is handling marketing and other services.

Allan Martin, senior vice president-global fiduciary services at Bankers Trust, said interest is growing in hiring minority and female money managers, especially among public funds, endowments and the pension funds of some regulated industries.

Since June 1, the pension funds of Ameritech, GE, PacTel, Kroger and Champion International have invested $105 million in Progress Trusts, the total size of the trust, which was set up by Progress Investment Management, a minority-owned manager of managers. Marx Cazenave, Progress' president and also president of the National Investment Management Association for minority managers, said Progress Trust has both an equity and a fixed-income component. The equity managers are: Amerindo; Brown Capital Management Inc.; CIC Asset Management Inc.; Cook Inlet Investment Management Inc.; Denis Wong & Associates; Greaves; NCM Capital Management Group Inc.; Sturdivant & Co. Inc.; Taplin, Canida & Habacht; and Westwood Management Corp. The fixed-income managers are: Amervest Co. Inc.; Cisneros Asset Management Co.; Cook Inlet; NCM; Reid McCoy Inc.; and Wedgewood Capital Management Inc.

Herbert Dyer, executive director of the $11.6 billion Maryland State Retirement and Pension Systems, Baltimore, said trustees wanted to give minority firms an opportunity because the pension fund does not have any minority managers. He said the commingled vehicle is a good way to get a sense of how several firms work.

"We felt we'd get the money under management sooner and develop a first-hand awareness of the work being done by the actual managers working for each trust," Mr. Dyer said.

Champion International considered various ways to hire more than its existing single minority manager. Frank Long, director-trust funds management for Champion's $1.1 billion pension fund, said Progress Trusts offered a choice of equity or fixed-income and a roster of high-quality managers.

"We went with a group trust because most of the (minority- and female-owned) firms don't meet our criteria (because of size or lack of track record). This was an opportunity to get involved with helping develop truly minority firms," Mr. Long said.

Mr. Cazenave said there is room for all of the approaches devised to encourage hiring of minority managers. He said he recognizes some minority managers don't want to have a third party "between them and the plan sponsors. That's not what we are trying to do. Most big corporations don't have the staff resources to monitor all these managers. We feel it is cost effective to use the manager-of-managers approach. Then if the plan sponsors want to hire them later individually, they can."

Ron Peyton, president of Callan Associates, a San Francisco consulting firm, said the manager-of-managers approach for minority firms relieves the big pension funds of all the time and manpower needed to search for, hire and monitor these managers. "It's a nice way to diversify the business risk of investing with these folks, and it clears up a problem of emerging managers and how they can be retained, especially by large funds that can't commit small amounts to one or two or three managers," he said.

Evaluation Associates offers the Americas Funds Trust, which also includes equity and fixed-income components, according to Lois Block, coordinator for the fund. The fund has $17.5 million in domestic equity and $22.5 million in domestic fixed-income assets under management, and recently got a $25 million commitment from an unnamed corporate pension fund to the equity component. All of the investors are corporate and public pension funds.

Seven minority-owned investment firms manage the pension trust. The equity managers are Ariel, Greaves, Taplin, Sturdivant and Valenzuela Capital Management, New York. The fixed-income managers are W.R. Lazard & Co. and Reid McCoy. Ms. Block said the initial managers were se-

See **Pension trusts** *on page 42*

Group formed to offer more than just kind words

More than 60 investment advisers, consultants and foundations are doing more than just paying lip service to increasing the participation of minorities in the money management profession.

They are paying for their education.

The benefactors have committed more than $200,000 to The Financial Services Fellowship Program, which provides full tuition and a stipend for minority students to attend the Columbia University School of Business in New York, according to Jerry Bardwell, president of the organization which oversees the fellowship program.

The fellowship is the brainchild of the Institute for Fiduciary Education, Sacramento, Calif. Its initiative led to the founding of The Financial Services Fellowship Program Inc., whose membership consists of representatives from pension plans and financial institutions.

In addition to the financial assistance, a mentor program has been established, and work is progressing on a summer internship program for the fellows, Mr. Bardwell said.

It is hoped — but not required — that, upon graduating, the fellows will enter the institutional money management profession.

"A fellow is not bound to the money manager profession," said Mr. Bardwell. "We think if people are exposed to it, a great number will be attracted to it."

Of the seven students in the initial program this fall, five receive financial sponsorship from The Financial Services Fellowship Program Inc., and two from Columbia University.

In subsequent years there will be 14 fellows, said Mr. Bardwell.

In January, The Financial Services Fellowship Program Inc. began a solicitation campaign targeting investment advisers — equity, fixed-income and real estate managers — consultants and foundations for contributions to the program.

A foundation made the single largest contribution, but the largest number of contributors were investment managers. They contributed an average of about $3,000 each, Mr. Bardwell said.

"From my point of view, I think the first year is the toughest," he said. "It will be less difficult in the coming years because they (donors) will be able to see the program in place." ▪

Students in the fellowship program are, from left: Mark Carter, Thomas Melendez, Monique Verret, Vincent Thompson, Susan Cross and Anthony Dinkins. Not pictured is Rodney Collins.

FIRMS OWNED BY MINORITIES & WOMEN

AIBC Investment Services

80 S.W. Eighth St., Suite 1970, Miami, Fla. 33130; (305) 372-8000

AIBC Investment Services, founded in 1986, offers public financing, asset management and full broker-dealer services.

Its equity investment approach focuses on blue-chip stocks with low leverage, p/es of less than 12 and dividend yield of more than 4%. For fixed-income accounts, it invests primarily in money market accounts or Treasury notes.

The firm also offers stock index option arbitrage.

Its areas of expertise in investment banking are public financing.

Key professionals are Jose Alvarado, chairman, and Cesar J.E. Batlle, chief executive officer.

Amerindo Investment Advisors Inc.

600 17th St., Suite 2325, Denver, Colo. 80202; (303) 629-1900

Amerindo Investment Advisors Inc., founded in 1979, offers investment management.

It has $525 million under management, of which $511 million is for tax-exempt clients.

Its equity approach uses small-capitalization stocks with a biotechnology and applied science bias.

Key professionals, and their years of experience, are Alberto W. Vilar, president, 26 years; Gary A. Tanaka, analyst, 19 years; and Leopoldo E. Guzman, analyst, 18 years.

Amervest Co. Inc.

1875 Century Park E., Suite 1740, Los Angeles, Calif. 90067; (213) 552-7972

Amervest Co. Inc., founded in 1983, offers discretionary investment management and advisory services to institutional plan sponsors.

It has $358 million in fully discretionary assets under management, all of which is for tax-exempt clients.

Its equity approach is value oriented. The primary consideration is the long-term total return of certain industry sectors and the stocks in these sectors. The strategy is to identify the undervalued stocks in the sectors that are expected to perform well over the short and longer economic or market cycle.

For fixed-income accounts it employs active and disciplined portfolio management techniques with emphasis on fundamental value analysis and management of risk through portfolio diversification.

Consulting services offered by the firm are asset allocation, investment policy development, performance and other strategic services to municipal agencies and various trust organizations.

Key professionals, and their years of experience, are Peter Cheung, managing director, 15 years; Mary Beth Sipprell, portfolio manager, five years; and Rustom Nagaowalla, assistant portfolio manager, three years.

Annuities West Inc.

600 Stewart St., Suite 1324, Seattle, Wash. 98101; (206) 441-7399

Annuities West Inc., founded in 1983, is an independent annuity search specialist and consultant. Areas of specialty include annuities for terminal funding, plan termination, state lotteries, structured settlements and deferred compensation.

Consulting services offered by the firm include rate surveys, consulting for actuaries, consultants, attorneys, insurance companies and plan sponsors.

Evelyn D. Williams, president, has 20 years of experience.

Apex Securities Inc.

333 Clay St., Suite 1310, Houston, Texas 77002; (713) 650-1122

Apex Securities Inc., founded in 1988, offers institutional equity and fixed-income executions, public finance and financial advisory services.

Its areas of expertise in investment banking are municipal finance and financial advisory services.

The firm has complete index trading capabilities.

Key professionals, and their years of experience, are Richard M. Ramirez, president, 10 years; Rodney G. Ellis, chairman, 10 years; and D. Kirk Snelling, vice president-sales and trading, six years.

Ariel Capital Management

307 N. Michigan Ave., Suite 1020, Chicago, Ill. 60601; (312) 726-0140

Ariel Capital Management Inc., founded in 1983, offers equity investment management.

It has $1.3 billion under management, of which $1.004 billion is for tax-exempt clients.

Its approach is to invest in companies that have been overlooked or underrated by other analysts relative to the firm's estimate of the companies' earnings over the next 12 months.

Key professionals, and their years of experience, are: John W. Rogers Jr., president, eight years; Derrice Wright, senior vice president, five years; and Eric McKissack, senior vice president, four years.

Athene-Coronado Management Corp.

26 Broadway, New York, N.Y. 10004; (212) 422-6920

Athene-Coronado Management Corp., founded in 1984, offers management of pension funds on a separate account basis in risk arbitrage.

It has $75 million under management, of which $60 million is for tax-exempt clients.

Its investment approach involves merger arbi-

Sharon Kalin, president, has 18 years of experience, and Richard Hownika, executive vice president, 14 years.

Beekman Capital Management Ltd.

535 Madison Ave., New York, N.Y. 10022; (212) 759-0306

Beekman Capital Management Ltd., founded in 1984, offers investment advisory services.

It has $130 million under management, of which $125 million is for tax-exempt clients.

Its equity approach is geared toward small, emerging growth companies.

Key professionals, and their years of experience, are Nedim Hamarat, president, 23 years; Mary Palmer, secretary/treasurer, 10 years; and Karen Gan, research analyst, 10 years.

Brooks Securities Inc.

25 Prospect Ave. W., Suite 700, Cleveland, Ohio 44115; (216) 861-6950

Brooks Securities Inc., founded in 1985, offers public finance, investment banking, financial advisory and brokerage services.

The firm provides fixed-income and equity brokerage. Consulting services are offered to governmental entities and small business venture capital start-ups.

Key professionals, and their years of experience, are Cleveland C. Brooks, president, 20 years; Charles M. Derricotte, vice president, six years; and Ralph S. Tyler, vice president, 10 years.

Brown Capital Management

809 Cathedral St., Baltimore, Md. 21201; (301) 837-3234

Brown Capital Management Inc., founded in 1983, is an equity investment manager focusing on relative value.

Key professionals, and their years of experience, are Eddie C. Brown, president, 20 years; and Joel Oppenheim, executive vice president, 20 years.

Capitalcorp Inc.

655 Montgomery St., San Francisco, Calif. 94111; (415) 981-4050

Capitalcorp Inc., founded in 1974 and acquired by its current management in 1989, offers broker/dealer, public finance, investment banking and asset management.

It has $224 million under management, of which $203 million is for tax-exempt clients.

Its fixed-income approach uses market timing, derivatives and immunization. It also invests in mortgage- and real estate-related products.

Its areas of expertise in investment banking are public finance, mortgage derivatives and securitization. Brokerage services offered by the firm include equity research focused on West Coast non-high-tech companies; it offers a wide range of fixed-income products.

Economic and financial consulting services also are offered.

Key professionals, and their years of experience, are Patricia Howe-Ellison, chairman, 33 years; Lorraine O. Legg, president, 30 years; and Leland S. Prussia, vice chairman, 35 years.

Cartwright & Goodwin Inc.

291 Broadway, New York, N.Y. 10007; (212) 267-7795

Cartwright & Goodwin Inc., founded in 1985, offers investment banking, broker/dealer, asset management, commercial hedging-foreign currency, equity and fixed-income research, proxy research and advisory services.

It has $100 million under management, none of which is for tax-exempt clients.

Its equity approach is to select stocks represented in the Standard & Poor's 500 Stock Index with B quality ratings or better and market capitalization in excess of $100 million.

Its areas of expertise in investment banking are negotiated and competitive municipal underwritings; venture capital; private placements; and proxy research.

Brokerage services offered by the firm are institutional brokerage; rebates; discounts; soft-dollar arrangements; ESOP; and transaction cost analysis.

The firm offers corporate financial advisory services in tax arbitrage; commercial hedging; portfolio management; equity transaction cost; and soft-dollar business.

Key professionals, and their years of experience, are Stephen R. Goodwin, president, 20 years; Yvonne O'Neal-Goodwin, vice president, eight years; and J. Robert Goodwin, vice president, three years.

Chapman Capital Management Inc.

2 Hopkins Plaza, Suite 1010, Baltimore, Md. 21201; (301) 625-9656

Chapman Capital Management Inc., founded in 1986, offers investment management services.

It has $60 million under management, of which $5 million is for tax-exempt clients.

For equity investment, it takes a long-term, value-oriented approach. For fixed-income accounts, it uses a value approach emphasizing maximum safety of principal and maintenance of liquidity. The firm also offers cash management, short-term and high-yield instruments.

Brokerage services offered by the firm are research and soft-dollar arrangements.

Key professionals, and their years of experience,

Earl U. Bravo Sr., president, 13 years; and H. Bernard Dorshow, senior analyst, 25 years.

CIC Asset Management Inc.

9536 Wilshire Blvd., Suite 214, Beverly Hills, Calif. 90212; (213) 273-8272

CIC Asset Management Inc., founded in 1989, offers equity investment management for institutions and high-net-worth individuals.

It has $52.5 million under management, of which $13.3 million is for tax-exempt clients.

CIC buys quality companies at attractive prices and takes a long-term investment perspective. Computer-based valuation screens and portfolio optimization techniques are used to ensure consistency throughout the process. In-house research is supplemented by Duff & Phelps.

Key professionals, and their years of experience, are Joe D. Campa, principal, seven years; Fernando Inzunza, principal, 10 years; and Jorge G. Castro, principal, five years.

Cisneros Asset Management

205 N. Presa B-200, San Antonio, Texas 78205; (512) 227-5200

Cisneros Asset Management Co., founded in 1989, offers active fixed-income management.

It has $108 million under management, all of which is for tax-exempt clients.

It actively manages portfolios using interest rate anticipation and sector shifts. The objective is to attain the highest total rate of return over a full market cycle consistent with the investment objectives and risk tolerances of each client.

Key professionals, and their years of experience, are Henry G. Cisneros, chairman, one year; Narciso Cano, president, one year; and Gilbert Garcia, senior vice president, five years.

Cook Inlet Investment Management Inc.

1 Bush St., 11th Floor, San Francisco, Calif. 94104; (415) 576-3434

Cook Inlet Investment Management Inc., founded in 1988, is an equity, fixed-income and cash manager.

It has $107 million under management, none of which is for tax-exempt clients.

Its equity approach focuses on a company's dividend paying history and dividend growth.

For fixed-income accounts, quantitative techniques are used to produce results that meet or exceed a specified benchmark, within each client's risk and return parameters.

Its cash management philosophy focuses on preservation of principal, providing for liquidity needs and producing competitive rates of return.

Key professionals, and their years of experience, are James E. Elder, president, 17 years; Lisa R. Weiss, senior vice president, 13 years; and William D. English, portfolio manager, four years.

Cooper, Van Dyke Associates Inc.

1100 N. Woodward, Suite 238, Birmingham, Mich. 48009; (313) 644-4514

Cooper, Van Dyke Associates Inc., founded in 1970, offers active equity and balanced management.

It had $51 million under management as of Dec. 31, of which $21 million was for tax-exempt clients.

Its equity approach emphasizes undervalued growth, buying quality and value and investing long term.

Key professionals, and their years of experience, are Marion Van Dyke-Cooper, chairperson, 30 years, and John A. Cooper, president, 20 years.

Doley Securities Inc.

616 Baronne St., New Orleans, La. 70113; (504) 561-1128

Doley Securities Inc., founded in 1976, offers brokerage, trading, financial advisory and investment banking services to institutions, government organizations and selected individuals.

Its equity approach is to choose established and growing companies, relying on fundamental analysis and technical factors. The firm aims for a maximum sector exposure of 20%.

For fixed-income accounts, it always purchases above-market returns, via competitive bids. It is an active, aggressive management.

The firm prefers investors free of South African interests.

Its areas of expertise in investment banking are municipal bonds and notes underwriting; federal, government and international securities; and corporate bonds, notes and equities.

Brokerage services offered by the firm are stock brokerage on all principal exchanges; options on futures; municipal bond, corporate bond and option trading; and commodities.

Key professionals, and their years of experience, are Harold E. Doley Jr., chairman, 22 years; John A. Washington, president, nine years, and Peter Armstrong, executive vice president, one year.

The directory of investment management consultants will be published Nov. 12.

Evergreen Asset Management Inc.

1001 Fourth Ave., Suite 3200, Se
Wash. 98154; (206) 224-9914

Evergreen Asset Management Inc., fou
1988, offers equity growth funds, cash mana
and execution services.

It has $50 million under management, all
is for tax-exempt clients.

Its equity approach is to identify 40 to 80
ties with superior risk/reward prospects us
damental analysis, diversification and game
Its cash management is a buy-and-hold
using money market and short corporate se
with maturities of from one day to three years

Key professionals, and their years of expe
are Elana Russell, president, 20 years; a
Patterson, vice president, 13 years.

EverGreen Capital Management Inc.

10250 Regency Circle, Suite 200
Omaha, Neb. 68114; (402) 392-7834

EverGreen Capital Management Inc., fou
1989, offers investment advisory services f
and private pension plans, foundations and
ments.

It has $13 million under management, o
$12 million is for tax-exempt clients.

The firm is a value manager, using a com
of undervalued small-cap and out-of-favor la
stocks in the portfolios.

Key professionals, and their years of exp
are Michael L. Green, president, four yea
Mary H. Jochim, vice president, 12 years.

Ewing Capital Inc.

1110 Vermont Ave. N.W., Suite 1
Washington, D.C. 20005; (202)
463-8787

Ewing Capital Inc., founded in 1981, offe
tutional equity research and brokerage, ass
agement and underwriting.

It has $8 million under management, of w
million is for tax-exempt clients.

Its equity approach is to select from those
try sectors and securities offering the great
adjusted expected total return using its dis
quantitative model.

The firm also offers equity and fixed-inco
derwriting in both private and public marke
kerage services offered by the firm are equ
fixed-income executions — agent and princi

The John Hancock Building in Chicago,

owned by The John Hancock Mutual Life Insurance Company,

is comprised of 100 stories, 2,800,000 square feet of floor space,

9 million pounds of steel, 11,459 panes of glass,

1,200 miles of electrical wiring, 50 elevators, 12 FM radio station

antennas, 8 television station antennas, 7 floors of parking,

and one real estate management company:

Coldwell Banker Commercial.

COLDWELL BANKER

FIRMS OWNED BY MINORITIES & WOMEN

Key professionals, and their years of experience, are Samuel D. Ewing, president, 29 years; Michelle R. Owens, assistant vice president, three years; and Mary A. Richardson, assistant vice president, eight years.

Graistone Realty Advisors

300 River Place, Suite 2050, Detroit,
Mich. 48207; (313) 259-9479

Graistone Realty Advisors Inc., founded in 1988, offers real estate investment advisory services.

It has $60 million under management, all for tax-exempt clients.

The firm makes real estate equity investments in selected U.S. cities, focusing on small- to medium-size core projects with limited or no leverage.

Key professionals, and their experience, are Charles E. Allen, president, 18 years; Handsel B. Minyard, executive vice president, 22 years; and Thomas J. Coates, executive vice president, 17 years.

Gramercy Capital Management Corp.

515 Madison Ave., New York, N.Y.
10022; (212) 935-6909

Gramercy Capital Management Corp., founded in 1986, offers equity investment management.

It has $73 million under management, of which $13 million is for tax-exempt clients.

Its equity approach is to invest in U.S. equity securities with a global perspective. The firm is value-oriented, emphasizing neglected stocks, undervalued by institutions, that are at moderate p/es, low price-book ratios and that primarily are medium- to smaller-cap companies.

Key professionals, and their years of experience, are Gerald I. White, chairman, 22 years; Joan E. Lappin, president and chief investment officer, 25 years; and Joel Goldsmith, analyst, four years.

Greaves Capital Management Inc.

1175 Peachtree St. N.E., Suite 200,
Atlanta, Ga. 30361; (404) 874-1284

Greaves Capital Management Inc., founded in 1985, offers domestic equity investment.

It has $180 million under management, all of which is for tax-exempt clients.

Its investment approach is value-oriented, investing in the securities of well-established, large- and medium-size companies. Investments are long term, with an emphasis on minimizing risk.

Key professionals, and their years of experience, are Keith A. Greaves, president, 20 years; Rodney L. Craig, associate, eight years; and Mia D. Butler, associate, three years.

Holt-Smith & Renk Inc.

4274 E. Towne Blvd., Madison, Wis.
53704; (608) 249-4488

Holt-Smith & Renk Inc., founded in 1987, offers equity, fixed and balanced accounts for individuals, pension funds, foundations and associations.

It has $20 million under management, of which $8 million is for tax-exempt clients.

Its equity approach is based on earnings growth at a reasonable valuation. Purchases are varied in terms of market capitalization. The stocks tend to be underfollowed, low-debt companies in attractive niches. Fixed-income accounts are actively managed. Average maturity can vary from two to 10 years based on interest rate anticipation. Core holdings are good quality bonds.

Key professionals, and their years of experience, are Marilyn Holt-Smith, managing director, 11 years; and Kristin Renk, managing director, 10 years.

Investment Advisors of Key Biscayne Inc.

240 Crandon Blvd., Suite 200, Key
Biscayne, Fla. 33149; (305)
361-7951

Investment Advisors of Key Biscayne Inc., founded in 1986, offers investment management of fixed-income securities, convertible debentures and common and preferred stocks.

It has $10.3 million under management, of which $2.4 million is for tax-exempt clients.

Its equity approach is conservative, involving long-term commitments to quality issues of common stocks. For fixed-income accounts, it manages portfolios through investments in U.S. government notes and good quality corporate issues. Ordinarily, a laddered maturity is used and particular maturity sectors are emphasized based on market conditions. For balanced accounts, the firm emphasizes the active contraction or expansion of commitments to stocks and bonds in response to changes in market conditions.

Key professionals, and their years of experience, are Ernestine Mckay, president, 22 years, and Margarita V. Fernandez, vice president, seven years.

Kenwood Group Inc.

77 W. Washington, Suite 1615,
Chicago, Ill. 60602; (312) 368-1666

The Kenwood Group Inc., founded in 1990, offers equity portfolio management.

It has $6 million under management, of which $5.5 million is for tax-exempt clients.

Its investment approach is bottom-up. Companies with market capitalizations of $200 million to $6 billion are subjected to various computer screens designed to highlight undervalued equities. That list is then examined for relative attractiveness using cash flow; sustainable growth prospects; relative ratio analysis; dividend and repurchase trends; balance sheet strength; and underlying assets. Finally, management actions are evaluated.

Key professionals, and their years of experience, are Barbara L. Bowles, president, 11 years; Barbara Jenkins, vice president, 10 years; and Mark W. Watson, vice president, three years.

WR Lazard & Co.

14 Wall St., New York, N.Y. 10005;
(212) 406-2700

WR Lazard & Co., founded in 1985, offers brokerage underwriting, financial advisory and asset management services.

It has $1.863 billion under management, all of which is for tax-exempt clients.

Its active equity approach combines fundamental and quantitative analysis. Companies are selected based on strong balance sheets, solid management, low multiple of earnings/cash flow; growth prospects; and low sensitivity to sudden market movements.

The firm's active fixed-income approach is value-oriented, emphasizing sector, issue and duration selection.

The firm offers structured investment strategies for both equities and fixed income.

Its areas of expertise in investment banking are municipal finance, secondary market trading and trading in corporate equity and debt markets.

Brokerage services offered by the firm are execution and research products and underwriting.

Key professionals, and their years of experience, are Robert I. Spruill, director of marketing, nine years; Alan B. Bond, equity portfolio manager, five years; and Frankie Hughes, director of asset management and fixed-income manager, nine years.

R. M. Leary & Co. Inc.

3300 E. First Ave., Suite 380, Denver,
Colo. 80206; (303)-320-1063 or
(800) 783-1063

R. M. Leary & Co., founded in 1978, is an investment management firm.

It has $27 million under management, of which $22.5 million is for tax-exempt clients.

Its equity approach uses mutual funds in a non-judgmental strategy that consists of exponents, differentials and control numbers that generate buy/sell signals. Each fund generates its own signal, i.e., all funds are not exchanged on one signal. A bond fund is used as a defensive position if interest rates are on a decline, and a money market fund within each fund family is used as a defensive position when the signals indicate leaving stock funds.

Key professionals, and their years of experience, are Kate Leary Lee, president, 11 years; Alyce R. Leary, vice president, eight years; and Carolyn Mertens, vice president, one year.

LM Capital Management Inc.

5560 La Jolla Blvd., Suite E, La Jolla,
Calif. 92037; (619) 459-8965

LM Capital Management Inc., founded in 1988, offers domestic, global and international fixed-income management.

It has $130 million under management, of which $7 million is for tax-exempt clients.

The firm's investment approach is fundamentally driven and risk averse, using short- to intermediate maturities.

Key professionals, and their years of experience, are Luis Maizel, president, seven years; John Chalker, vice president, 10 years; and Tobias Gorodzinsky, analyst, two years.

The Edgar Lomax Co.

526 King St., Suite 201, Alexandria,
Va. 22314; (703) 684-0803

The Edgar Lomax Co., founded in 1983, offers investment management.

It has $2 million under management, of which $550,000 is for tax-exempt clients.

Its equity approach combines a value stock selection approach with the use of market timing indicators in order to periodically hedge with stock index futures.

Randall R. Eley, president, has 11 years of experience.

The Marshall Plan L.P.

31 Milk St., Boston, Mass. 02109;
(617) 482-4640

The Marshall Plan L.P., founded in 1988, offers equity investment management and fiduciary trading services.

It has $42 million under management, all of which is for tax-exempt clients.

Its equity approach is quantitative, systematic and disciplined. Equities are divided into segments of the market (e.g. large cap, value, small-cap growth) and selects that segment which is expected to outperform. Computerized modeling ranks securities within segments, and produces undiversified (concentrated, aggressive) and diversified (core) portfolios.

Key professionals, and their years of experience, are Greta E. Marshall, principal, 30 years; Marc Gresack, director of trading, 13 years; and Kimberly A. Ratcliffe, director of research, six years.

MCQ Inc.

23422 Broadwell Ave., Torrance, Calif.
90502; (213) 534-0811

MCQ Inc., founded in 1966, offers equity management.

It has $1.161 billion under management, of which $1.021 billion is for tax-exempt clients.

Its equity strategy is to achieve superior long-term performance while minimizing the loss of principal. MCQ writes options on an existing portfolio that is managed independently of MCQ. The purpose is to provide incremental return from 1% to 4% per year over a full market cycle.

Key professionals, and their years of experience, are Chuck Q. Moo, president, 30 years; Paul Hildebrand, vice president, 32 years; and Gary Lai, vice president, 24 years.

Metro Equities Corp.

220 S. State St., Suite 2014, Chicago,
Ill. 60604; (312) 939-5155

Metro Equities Corp., founded in 1981, offers investment banking, investment advisory services, institutional brokerage and financial consulting.

It has $25 million under management for tax-exempt clients in a joint venture with MEI Group.

Its equity approach is growth-oriented, focusing on large-cap stocks with consistent dividends and consistent earnings stream. In international equities, it focuses on growth-oriented issues with an emphasis on asset allocation and country. For fixed income, it uses A or better bonds of no more than 10 years maturity issued by non-cyclical companies.

Investment banking services include co-managing municipal bond issues, financial advisory services and institutional brokerage.

Consulting services offered by the firm have a proprietary structure used to reduce municipal and corporate issuer cost.

Key professionals, and their years of experience, are Donald R. Davidson Sr., chairman, nine years; Donald R. Davidson Jr., vice president, six years; and Richard Horwitch, vice president, four years.

Nakagama & Wallace Investment Management

74 Trinity Place, Suite 500, New York,
N.Y. 10006; (212) 962-4100

Nakagama & Wallace Investment Management, founded in 1983, offers U.S. equity, fixed-income and balanced management.

It has $6.2 million under management, of which $1.8 million is for tax-exempt clients.

Its equity approach applies conservative securities analysis techniques to screen companies for high quality, potential earnings growth, and investment value. Particular attention is paid to p/e ratios; the firm buys at the low end of the historical range and sells at the upper end.

For fixed-income accounts, it invests primarily in U.S. government and agency obligations and high-quality corporate bonds. The firm watches the yield curve, sector shifts, quality spreads and relative price movements.

In balanced accounts, fixed income is used to reduce volatility. Stocks are managed as they are in equity accounts to maximize total return.

Key professionals, and their years of experience, are: John C. Sutherland, head of investments, 30 years; Sam I. Nakagama, chief economist, 35 years; and A. Ann Wallace, president, 20 years.

NCM Capital Management Group Inc.

2 Mutual Plaza, 501 Willard St.,
Durham, N.C. 27707; (919)
688-0620

NCM Capital Management Group Inc., founded in 1986, offers investment management services.

It had $509.7 million under management, of which $439.7 million is for tax-exempt clients.

Its equity approach is quantitative, identifying those stocks that have the characteristics of low relative and absolute p/e ratios, positive earnings surprise and attractive earnings momentum relative to other stocks in the firm's 1,000-stock universe. Fundamental analysis is then used to select portfolio holdings.

Its fixed-income portfolios are constructed to match client objectives. High-grade securities, with an emphasis on Treasury and agency obligations, or top-grade general obligation bonds, are used. The portfolio has a core portion that closely matches the target index and, if desired by the client, a portion that is actively traded between cash equivalents and long-term Treasuries.

Key professionals, and their years of experience, are Maceo K. Sloan, president and chief executive officer, 19 years; Cicero M. Green, senior vice president, 35 years; and Isaac H. Green, vice president, six years.

Newgate Management Associates

126 Main St., P.O. Box 628,
Northampton, Mass. 01061; (413)
586-6520

Newgate Management Associates, founded in 1982, offers investment management and research specializing in closed-end funds worldwide.

It has $98.5 million under management, none of which is for tax-exempt clients.

Its equity approach is to build three distinct global portfolios of closed-end funds: equity, balanced and fixed income. The firm analyzes more than 450 closed-end equity funds for possible inclusion in the portfolio, which typically is composed of 15 to 25 funds. Funds are selected based on performance, correlations with specific markets or regions, volatility and relative valuation using a variety of statistical and fundamental data.

For global fixed-income accounts, Newgate's portfolio purchases highly rated funds trading at significant discounts that aggressively shifts assets across maturities and currencies.

Key professionals, and their years of experien
are Sonia Graciela Rosenbaum, partner, 17 ye
George Foot, partner, 12 years; and Nancy W
berg, director of marketing, eight years.

Precision Asset Management

1299 Ocean Ave., Suite 105, Santa
Monica, Calif. 90401; (213)
394-5756

Precision Asset Management, founded in 19
offers equity, fixed-income and balanced portf
management services.

Its equity approach is fundamental analysis
plied quantitatively and focused on profitability a
growth. Stocks are ranked, evaluated and eq
weighted in a 40-stock portfolio. For fixed-inco
accounts, it uses a quality and total return approa
that is quantitative in application, emphasizes g
ernment and high-quality corporate bonds and rel
on historical interest rate relationships and curr
trends.

Key professionals, and their years of experien
are Joe E. Ransom, president and chief executi
officer, 18 years; James H. Parks III, senior v
president and portfolio manager, 10 years; and D
borah J. Smith, vice president, four years.

Reid McCoy Inc.

8 E. Hamilton St., Baltimore, Md.
21202; (301) 332-0893

Reid McCoy Inc., founded in 1987, offers a
tive investment management of investment-gra
money market and bond portfolios.

It has $64 million under management, of wh
$59 million is for tax-exempt clients.

Its investment approach is moderately defe
sive, maintaining a high degree of principal stabi
and contributing a steady stream of current incom
The overall goal is to provide consistent posit
performance through appropriate maturity and
dustry selections.

Key professionals, and their years of experienc
are Larry McCoy, principal, 13 years; Vernon
Reid, principal, 13 years; and Deborah L. Stalling
vice president, 12 years.

RhumbLine Advisers Corp.

30 Rowes Wharf, Boston, Mass.
02110; (617) 345-0434

RhumbLine Advisers Corp., founded in 199
offers domestic and international investment ma
agement.

Its equity approach uses indexed and structur
portfolios. Its fixed-income accounts are passive.

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Key professionals, and their years of experience, are J.D. Nelson, chief executive officer, 12 years; John A. Denney, chief investment officer, 10 years; and Wayne T. Owen, director of marketing, 12 years.

Rosenblum-Silverman-Sutton Inc.

70 Pine St., Suite 4213, New York, N.Y. 10005; (212) 344-3232

Rosenblum-Silverman-Sutton Inc., founded in 1975, offers investment management.

It has $150 million under management, of which $22.1 million is for tax-exempt clients.

Its equity approach is top-down sector rotation. For fixed-income accounts it uses laddered maturities of short to intermediate duration.

Key professionals, and their years of experience, are: Barbara G. Rosenblum, chief executive officer, 31 years; Vera L. Silverman, chief executive officer, 30 years; and Phyllis R. Sutton, president, 30 years.

The firm has an office in San Francisco at 1388 Sutter St., Suite 725, San Francisco, Calif. 94109; (415) 771-4500.

San Juan Asset Management Inc.

16521 Grunion Lane, Suite 304, Huntington Beach, Calif. 92649; (714) 840-0220

San Juan Asset Management Inc., founded in 1989, offers investment management and institutional equity research.

Its equity approach is value oriented and risk averse. Portfolios typically have a higher yield than the market. The philosophy is designed to preserve capital in declining markets.

Key professionals, and their years of experience, are Lawrence Cisneros, president, 12 years; and James Boothe, vice president, nine years.

Muriel Siebert & Co. Inc.

444 Madison Ave., New York, N.Y. 10022; (212) 644-2400

Muriel Siebert & Co. Inc., founded in 1967, offers stock and bond brokerage and underwriting, equity trade executions at discounted commission, and municipal bond underwriting as co-manager and underwriter.

Its areas of expertise in investment banking are underwritings of corporate equity and municipal financings. The special brokerage services offered by the firm are quality order execution on all major exchanges at discounted rates as low as 3 cents per share.

Key professionals, and their years of experience, are Muriel Siebert, president, 35 years; Richard Bieber, vice president, 11 years; and Patricia Decker, senior vice president-municipals, 14 years.

Sit Investment Associates

4600 Norwest Center, 90 S. Seventh St., Minneapolis, Minn. 55402; (612) 332-3223

Sit Investment Associates Inc., founded in 1981, offers separate account management of domestic securities.

It has $2.652 billion under management, of which $2.259 billion is for tax-exempt clients.

Its equity approach is growth oriented using large- and small-cap stocks and sector rotation. For fixed-income accounts, it uses interest rate anticipation and a stable return approach. Its balanced accounts incorporate the equity and fixed-income approaches.

Key professionals, and their years of experience, are Eugene C. Sit, president, 28 years; Peter L. Mitchelson, executive vice president, 22 years; and Michael C. Brilley, vice president, 22 years.

Sit/Kim International Investment Associates Inc.

4600 Norwest Center, 90 S. Seventh St., Minneapolis, Minn. 55402; (612) 332-3223

Sit/Kim International Investment Associates Inc., founded in 1989, offers global equity asset management.

It has $73 million under management, of which $47 million is for tax-exempt clients.

Its equity approach is thematic growth, seeking above-average growth industries worldwide. It has special capabilities in private placements in restricted Pacific Basin countries.

Key professionals, and their years of experience, are Eugene C. Sit, chairman, 28 years; Andrew B. Kim, president, 25 years; and Peter L. Mitchelson, executive vice president, 22 years.

The firm also has offices in New York and San Francisco.

Smith, Graham & Co. Asset Managers

333 Clay St., Suite 4470, Houston, Texas 77002; (713) 739-1113

Smith, Graham & Co. Asset Managers, founded in 1990, offers fixed-income investment management.

It has $15 million under management, all of which is for tax-exempt clients.

It invests primarily in mortgage-related securities with a pro-active, quantitative approach using two proprietary investment models.

Key professionals, and their years of experience, are Gerald Smith, chief executive officer, 15 years; Ladell Graham, president and chief investment officer, seven years; and Jamie House, vice president, seven years.

Sturdivant & Co. Inc.

130 N. Broadway, Suite 1007, Camden, N.J. 08102; (609) 365-8884

Sturdivant & Co. Inc., founded in 1988, offers equity investment management, equity research and equity brokerage.

It has $6 million under management, all of which is for tax-exempt clients.

It uses a relative value, bottom-up investment approach that is about 70% qualitative and 30% quantitative. Beginning with a 7,000-stock universe, the firm screens for companies with capitalizations greater than $500 million, below-market p/e and price/book characteristics, and positive earnings growth momentum. This list is narrowed further on quantitative and qualitative factors until a pool of 60 companies is left, from which the 35- to 40-stock portfolios are formed.

The firm offers a complete range of specialized brokerage services in domestic, international and OTC markets.

Key professionals, and their years of experience, are Ralph A. Sturdivant, chairman, 15 years; Albert A. Sturdivant, president, 16 years; and Lorraine Howard, managing director, 17 years.

The firm also has an office at 1428 N. Broad St., Suite 201, Philadelphia, Pa. 19121; (215) 232-9030.

Taplin, Canida & Habacht

1001 S. Bayshore Drive, Miami, Fla. 33131; (305) 379-2100

Taplin, Canida & Habacht, founded in 1985, offers domestic equity and fixed-income management.

It has $150 million under management, of which $75 million is for tax-exempt clients.

Its equity approach is a combination of quantitative and qualitative analyses, seeking companies undervalued on an asset valuation or earnings basis.

For fixed-income accounts, it is risk averse, emphasizing intermediate maturities through controlled maturity decisions.

Key professionals, and their years of experience, are Tere Alvarez Canida, president, 14 years; Alan M. Habacht, partner, 22 years; and William J. Canida, partner, 15 years.

Tiffany Capital Advisors Inc.

15 Crow Canyon Court, Suite 200, San Ramon, Calif. 94583; (415) 831-1613

Tiffany Capital Advisors Inc., founded in 1989, offers equity investments.

It has $200 million under management, none of which is for tax-exempt clients.

The firm invests in growth companies that have proven their capabilities of growing operating earnings in a reliable and consistent basis, and whose most recent growth has been accelerating.

Key professionals, and their years of experience, are: Curtis O. Townsend, president, 27 years; P. Don Lattimer, chairman, 33 years; and Leona Schubert, vice president, 25 years.

United Daniels Securities

170 Broadway, New York, N.Y. 10038; (212) 227-7723

United Daniels Securities Inc., founded in 1984, offers institutional research and investment banking.

Its areas of expertise in investment banking are municipal underwriting and corporate finance.

The firm also offers proxy research and consulting services for other minority firms.

Key professionals, and their years of experience, are: Willie L. Daniels, president, 29 years; E. LaVerne Cornwell, senior vice president, 14 years; and Carmen De Cato, senior vice president, 20 years.

Valenzuela Capital Management Inc.

14 Wall St., Suite 1800, New York, N.Y. 10005; (212) 227-3590

Valenzuela Capital Management Inc., founded in 1989, offers equity management.

It has $4 million under management, of which $2 million is for tax-exempt clients.

Its equity approach uses active, bottom-up stock selection emphasizing non-S&P 500 companies. It looks for companies selling for below-market valuations and are showing positive rates of change in returns, cash flow, or, especially, earnings.

Key professionals and their years of experience are Tom Valenzuela, principal, 10 years, and Mariko Osceola Gordon, principal, six years.

ValueQuest Ltd.

Roundy's Hill, Marblehead, Mass. 01945; (617) 631-5508

ValueQuest Ltd., founded in 1982, offers domestic and international equity management.

It has $328 million under management, all tax exempt.

The firm's equity approach is contrarian value, concentrating on the lower quintile of the market in undervalued earnings, assets and quality. It focuses on intrinsic value, using a combination of screens and fundamental analysis, with a three- to five-year time horizon per security.

Key professionals, and their years of experience, are: Katherine B. Magrath, partner and chief investment officer, 27 years; John C. Moore, senior investment professional, 25 years; and Terrence B. Magrath, partner and chief investment officer, 21 years.

Vaquero Investment Management Co.

1100 N.W. Loop 410, Suite 613, San Antonio, Texas 78213; (512) 344-9101

Vaquero Investment Management Co., founded in 1990, offers fixed-income management focused on short and intermediate portfolios of U.S. Treasury securities. Preservation of principal, control of event/credit risk and liquidity are paramount.

The firm uses futures/options overlay strategies.

Investment banking and brokerage are offered through an affiliate, Southwestern Capital Markets Inc.

Key professionals and their years of experience are: Robert G. Rodriguez, president, 11 years; Dennis T. Cunningham, executive vice president, 13 years; and Madelon Yanta, vice president, five years.

Wall Street Investment Corp.

7600 Georgia Ave. N.W., Suite 100, Washington, D.C. 20012-1616; (202) 726-2100

Wall Street Investment Corp., founded in 1981, offers financial advisory services, corporate and municipal underwriting, private placement of debt and equity securities, and general financial services and insurance.

Investment banking services offered are mergers, acquisitions and divestitures, government-oriented projects, bankruptcies and turnarounds, real estate finance, venture capital, and third-party equipment lease finance. It also offers brokerage services, and consults on general finance and insurance.

Key professionals, and their years of experience, are G.H. Starke Jr., chairman, 15 years; G.P. Shea, president, 13 years; and R.C. Davis, senior vice president, 23 years.

Public funds will be highlighted in the Oct. 29 issue.

PERFORMANCE IMPROVEMENT. (OVERNIGHT.)

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[John Dorian and Charles Walbrandt, Investing Magazine, Winter 1990]

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Ward & Associates Asset Management

133 Peachtree St. N.E., Suite 3910,
Atlanta, Ga. 30303; (404) 524-3900

Ward & Associates Asset Management, founded in 1989, offers asset management and municipal bond banking and underwriting.

It has $40 million under management, all tax exempt.

Its equity approach is indexed and tailored to meet certain client objectives, such as South Africa free.

Its fixed-income approaches are intermediate- and long-term active relative value-based.

Key professionals and their years of experience are Felher W. Ward Jr., president, 12 years; Michael S. de Vegter, managing director, eight years, and Kenneth R. Holley, portfolio manager, five years.

Westwood Management

885 Third Ave., New York, N.Y.
10022-4802; (212) 688-2323

Westwood Management Corp., founded in 1983, offers equity and balanced management.

It has $1.02 billion under management, of which $950 million is for tax-exempt clients.

It is risk-conscious, using a top-down, sector rotation methodology. It stresses principal preservation in three distinct product offerings: defensive equity, balanced and fully invested equity.

Key professionals and their years of experience are Susan M. Byrne, president, 20 years; David W. Jennings, executive vice president, 20 years, and Francine J. Bovich, senior vice president, 17 years.

WFG Investment Management Inc.

1331 H St. N.W., Washington, D.C.
20005; (202) 628-7457

WFG Investment Management Inc., founded in 1985, offers equity, fixed-income and balanced accounts.

It has $27 million under management, of which $20 million is tax exempt.

The firm is a conservative, long-term value investor. Its equity focus is on stocks whose p/e ratios are low compared to historical levels and to the past and projected future growth rates of the company.

Fixed-income purchases are diversified by type and term, so portfolios are structured to realize a high total return while minimizing risk.

An affiliated firm, Potomac Investment Co., provides brokerage services.

WFG also specializes in financial planning and real estate consulting.

Key professionals and their years of experience are: Carol Greenwald, president, 25 years; Linda Mundy, senior vice president, 20 years, and Eva Komreich, research associate, four years.

Denis Wong & Associates

1314 S. King St., Suite 1057,
Honolulu, Hawaii 96814; (808)
537-9931

Denis Wong & Associates, founded in 1983, offers equity, fixed-income and balanced management.

It has $57 million under management, all tax exempt.

Its equity approach is bottom up, identifying fundamentally strong companies with rising price trends, preferably with a low beta. Stocks of Hawaiian-based companies are in all portfolios.

Its fixed-income approach is top down, uses interest rate anticipation and stresses safety of principal.

Key professionals and their years of experience are Denis Y. Wong, president, 27 years; Andrew Ing, chairman, 46 years; and Brian H. Monkuni, vice president, seven years.

Yaeger Securities Inc.

16633 Ventura Blvd., Suite 1220, Los
Angeles, Calif. 91436; (818)
377-6300

Yaeger Securities Inc., founded in 1981, is a broker-dealer.

Its areas of expertise in investment banking are co-managing public finance and tax-free issues and fixed-income and equity issues. It also provides investors with research, portfolio monitoring, tax-advantaged investments, private placements, mutual funds and prompt execution capabilities on listed trades, as well as an equity and fixed-income trading desk.

It also offers investment management selection services.

Key professionals and their years of experience are Norma Yaeger, president, 25 years; David Davis, fixed-income institutional trader, 27 years; and Norman Phair, vice president-equity trading, 31 years.

Zevenbergen Capital Inc.

1505 IBM Building, 1200 Fifth Ave.,
Seattle, Wash. 98101; (206)
682-8469

Zevenbergen Capital Inc., founded in 1987, offers equity management.

It has $31 million under management, of which $11.5 million is tax exempt.

The firm invests in companies showing above-average earnings growth prospects and strong financials. It follows a bottom-up approach to discover companies that provide superior products or services and will show consistent profitability.

Key professionals and their years of experience are Nancy Zevenbergen, principal, nine years, and Linda Selegue, vice president, 16 years.

Pension trusts

Continued from page 35

lected from a universe of 33 for their varied investment approaches, performance records and the diversity of their ethnic backgrounds.

There was a great deal of discussion about the lack of significant minority and female representation in public pension fund money management in America today at the annual meeting of the National Association of State Treasurers July 21-25.

The group adopted a resolution calling on members to work to increase the extent of participation by qualified minority- and female-owned firms as fund managers for public pension funds.

Most state treasurers also serve as custodians of their state pension funds. ■

M&A flying high in Europe

NEW YORK — M&A deals were flowing freely in Europe in the third quarter, even though the number of U.S. mergers and acquisitions slowed to a trickle.

The approaching unification of the European Economic Community sent European M&A transactions soaring 42.1% in the third quarter compared with the year-earlier period, although the value of the transactions was down 21.7%, according to a report by IDD Information Services, New York.

Smaller deals were common, as 3,993 European concerns were targeted in deals worth a total of $99.5 billion in the first three quarters of 1990, compared with 2,810 deals worth $127.1 billion acquired during the same period the previous year.

U.S. transactions were down in number and value. The number of transactions fell 11.8% in the third quarter, contributing to a 16.6% drop for 1990 from the previous year's period. The number of transactions announced declined to 3,193, from 3,829 for the first three quarters of 1989.

The value of transactions plummeted more than 47% to $172.4 billion from $331.5 billion for the first three quarters of 1989.

"The removal of national barriers increases the potential for M&A as industries consolidate and restructure to compete more effectively on a global basis. American companies can take advantage of the changes in Europe to make attractive investments," said the IDD report.

Foreign buyers continue to b interested in U.S. acquisitions having announced offers or acquired a minority interest in 43 U.S. companies for $46.8 billion Japanese companies led the foreign foray into the U.S. with 7 bids valued at $11 billion followed by U.K. and French companies with $9.9 billion and $9. billion, respectively.

The mode of acquisition is changing globally as a result of the demis of the junk-bond market. The number of tender offers and leverage buy-outs declined 53.9% and 71.1 respectively. Tender offers decline to 82 from 178 in the first thre quarters of 1989 and announced leveraged buy-outs skidded to 11 va ued at $7.7 billion from 38 wort $23.3 billion.

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Pe &Investments

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AT DEADLINE

Callan loses Fulton County

Two Fulton County, Georgia, employee pension boards have reversed their earlier decision to hire Callan Associates Inc. as consultant because of concerns about political influence on the firm, as well as Callan's fees.

The Fulton County Employees' Pension Board and Fulton County General Employees' Pension Board will begin contract negotiations with Wyatt Asset Services.

Travelers seeks ruling

The Travelers Corp. has filed suit in federal court in Hartford, Conn., asking the court to determine the proper method of liquidating and distributing assets to investors in Travelers Insurance Co.'s troubled Separate Account R open-end commingled real estate fund.

The Travelers suit comes on the heels of a suit filed by the Dallas Police and Fire Pension Fund accusing Travelers of fraud, misrepresentation and breach of fiduciary duty.

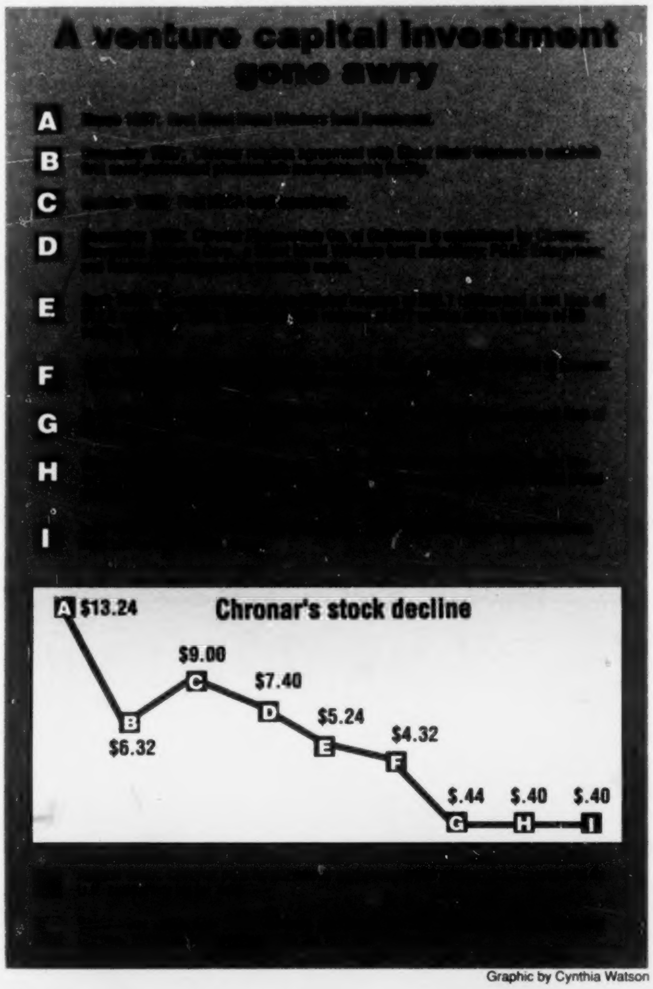
Managers pick up accounts

The $850 million San Bernardino County Employees' Retirement System has selected Mellon/McMahan Real Estate Advisors Inc., San Francisco, to manage its $93.4 million real estate portfolio, replacing The Yarmouth Group Inc. . . . The $300 million Employees' Retirement System of the City of Norfolk, Va., has awarded $50 million each to fixed-income managers Western Asset Management and Lowe, Brockenbrough, Tierney & Tattersall. It renewed an account with Gardner & Preston Moss and terminated Wentworth, Hauser & Violich. . . . The $1.65 billion Idaho Public Employees Retirement System has hired Globe Finlay Inc. to actively manage a European portfolio.

INSIDE

Is that all there is?

Contrary to popular belief in the investment community, Rule 144A was not designed to enlarge private placements' slice of the capital markets and so should not be considered a flop.
Commentary, Page 16.



Graphic by Cynthia Watson

$85 million stake up against the wall

By Hillary Durgin

Two multibillion-dollar union pension funds' $85 million venture capital stake in a solar energy company is on the line as the company faces possible bankruptcy.

During the past three years, the Sheet Metal Workers' National Pension Fund and the National Electrical Contractors Association Pension Benefit Trust Fund have invested their pension assets into Chronar Corp., Lawrenceville, N.J. The two funds own a total of 78.2% of the company's stock — an extraordinarily high stake for pension funds.

The investments strongly suggest a desire by the funds to create jobs for union members, a social investing practice that could run afoul of the private pension

See **Unions** *on page 48*

Funds shift target for proxy season

New focus put on directors

By Marcia Parker

Two public pension funds are among the institutional investors launching campaigns in advance of the 1991 proxy season that will shake up boards of directors.

"The difference this season will be the focus on boards of directors. It's a clear shift in direction, which stems from the institutional investors' view that the most important thing is to elect a board to represent them," said Peg O'Hara, director of the corporate governance service at the Investor Responsibility Research Center, Washington.

Activist investors are focusing attention on how boards perform and how independent they are, and to open a direct line of communication with the boards.

The California Public Employees' Retirement System, one of the most activist in the nation, has sent letters and questionnaires to the 4,600 directors of the Fortune 500 companies.

Richard Koppes, general counsel, said the fund is asking directors what criteria should be used to evaluate the performance of directors and companies, whether directors should own stock in the companies they help run and whether the chief executive officer should be chairman of the board.

The pension fund also solicited views on state laws protecting companies from takeovers, and asked directors whether they'd like to be considered for other boards.

The letter stresses the fund won't use the data to determine how to vote on a nominee. "Our goal here is to develop and disseminate information about directors and director candidates and to encourage the election of the best qualified people we can find," the letter says.

The fund also invited the directors to communicate directly with the pension fund. The data will be used to build a data base with Institutional Shareholder Services Inc., profiling all the directors of companies in the Standard & Poor's 500 Stock Index. It would be the first time such extensive data would be compiled.

Institutional investors also will be sponsoring several different shareholder resolutions relating to board activities for the first time in the 1991 season.

"We see the board of directors as the main focus," Mr. Koppes said. "We will more carefully review our vote for directors next year and publicize that vote. We want to put some more light . . . on the independence of directors and the need for boards to be composed of a majority of outsiders."

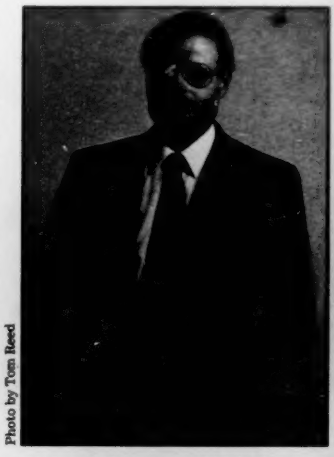


Photo by Tom Reed

Richard Koppes said his fund is seeking standards to evaluate director performance.

The California fund is sponsoring its first shareholder resolution to require a majority of the company's board to be independent, as defined by the Council of Institutional Investors: Someone who has not been employed by the corporation or an affiliate in an exec-

See **Proxy season** *on page 50*

FMC ups interest in distressed securities

By Marlene Givant Star

CHICAGO — Marshaling their investing experience with distressed securities, executives for the $1 billion FMC Corp. retirement plans increased the commitment to the talked-about but largely uncharted asset class.

For six years, FMC has been investing its defined benefit plan — and for two years, its defined contribution plan — in distressed securities, an area most large pension funds are only beginning to examine. While the investments make up an insignificant portion of the total retirement assets, which are split roughly evenly between defined benefit and defined contribution plans, they are viewed as an important component of the philosophy that has placed FMC in the top 1% of large funds in the SEI Capital Resources Co. performance universe for the 10-year period ended Dec. 31.

FMC's defined benefit plan returned a compound annual 18% for the 10 years ended Dec. 31.

FMC recently made its first investment specifically in the distressed area, committing 2% of its defined benefit assets to the Zell Chilmark limited partnership fund.

To date its existing distressed securities investments have been part of diversified portfolios, including a mutual fund for the defined contribution plan called Mutual Qualified Income Fund managed by Heine Securities Corp. in Short Hills, N.J., and a separate account for the defined benefit plan managed by Peter Cundill & Associates, Vancouver, British Columbia. In both cases, distressed investments do not exceed 20% of the portfolio, with the rest in stocks and bonds.

The motivation for distressed securities investment "obviously

See **FMC** *on page 50*

NEWS DIGEST

Michael Dubrow has joined NCM Capital Management Group as vice president and operational head of the firm's new guaranteed investment management division, which will emphasize the active development and use of GIC synthetics. Page 41.

Southern Co.'s David Prince and six other executives join Delaware Investment Advisers' operations. Page 4.

SEI Corp. has reorganized by target markets rather than by products. Page 6.

SPECIAL REPORT: PUBLIC FUNDS

Officials overseeing the investments of public pension systems face a myriad of issues — from social investing to maintain the plans funded status and ways to increase diversification. Page 21.

FINANCING

Middle Market Group has undergone a management buy-out, but the firm will continue to serve midsize companies. Page 37.

More than 300 corporate debt issuers were downgraded during the first three quarters of 1990. Page 39.

INTERNATIONAL

Units of Unisys and Dow Chemical are among the Swiss firms adapting higher equity exposures. Page 3.

PanAgora Asset Management landed new accounts for the pension funds of G. Heileman Brewing and TRW and Nuclear Mutual's general account. Page 32.

Global asset allocators have shown a superior ability to move money and markets. Page 35.

REAL ESTATE

Pension funds' property commitments should hold firm, the new Emerging Trends report finds. Page 34.

Callan Associates has surprised some investors with its finding that separate realty accounts provide almost double the return of commingled funds. Page 2.

DEPARTMENTS

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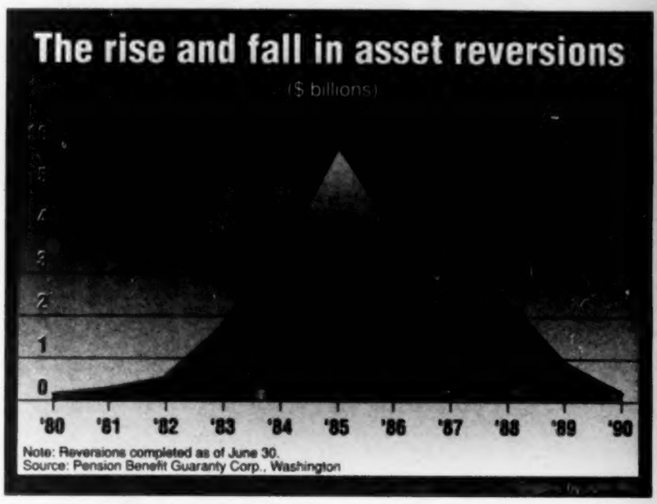
Top 1,000 Funds survey in progress

***Pensions & Investments*' annual survey of the Top 1,000 pension funds in the nation is under way. Questionnaires have been mailed for the directory, which will be published in the Jan. 21 issue. The deadline is Nov. 11. If you have not received a questionnaire, or have a question regarding the form, please contact Christine Philip, directory coordinator, at (312) 649-5217.**

Reversion coup de grace

Bill's tax provisions spell end for plan terminations

By Joel Chernoff



The rise and fall in asset reversions

Note: Reversions completed as of June 30.
Source: Pension Benefit Guaranty Corp., Washington

WASHINGTON — Chalk up another practice of the 1980s that has bit the dust: terminations of overfunded pension plans.

Nine years after the new German owners of the A&P supermarket chain recouped a large part of their investment by terminating the company's overfunded pension plan, the practice effectively has been snuffed out by Congress.

While Congress has debated the issue, employers have terminated nearly 2,200 overfunded plans, recapturing more than $21 billion in surplus assets.

In the budget-reconciliation bill expected to be passed by Congress last week, the excise tax on surplus assets could soar as high as 50% from the current level of 15%. Add the corporate income tax rate of 34%, and terminations will become prohibitively costly for all but those companies in dire need of cash.

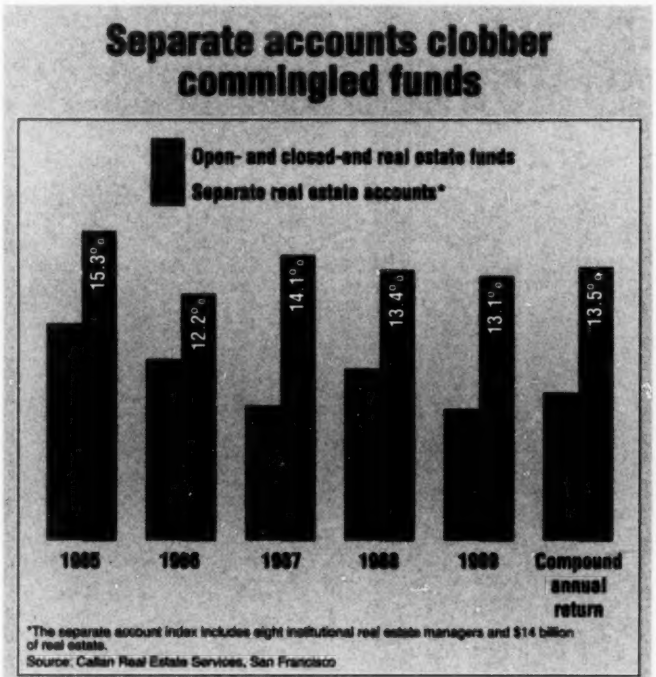
"This is probably the end game for the termination reversion issue," said David M. Walker, national director-compensation and benefits, Arthur Andersen & Co., Washington, and a former Reagan administration pension official.

Basically, the bill would raise the basic excise tax to 20%. But under the House version, which was expected to prevail, employers would have to use 30% of the surplus as a cushion in a replacement plan or face an additional 30% excise tax. Employers in liquidation proceedings would be exempt from the additional tax.

Most employers would be expected to set up a new plan. Because only the reversion and not the cushion would be subject to

See **Budget** *on page 47*

Gap found in realty returns



Separate accounts clobber commingled funds

*The separate account index includes eight institutional real estate managers and $14 billion of real estate.
Source: Callan Real Estate Services, San Francisco

Graphic by Holly Seguine

By Steve Hemmerick

Pension funds using real estate separate accounts get almost double the investment returns of commingled real estate funds, Callan Associates says.

Real estate separate accounts scored a 13.5% compound annual return between 1985 and 1989, vs. 7.3% for commingled funds, according to Callan, a San Francisco-based consulting firm. Callan's statistics came from its client data base.

The separate account performance contradicts some pension executives' contention that real estate in general has not performed well during the past several years. But the numbers also support — and likely will escalate — the move by pension funds to separate accounts and away from commingled funds.

This year, for the first time, tax-exempt investors — mostly larger pension funds — tipped the real estate asset balance to 50.4% in favor of separate accounts.

Meanwhile, the high return for real estate separate accounts surprised some investors: Unlike

See **Returns** *on page 46*

Health-cost reporting speeded

By Fred Williams

A little-known SEC staff accounting bulletin could force companies to disclose their accrued liabilities for retiree medical costs as early as next year.

According to a 1987 Securities and Exchange Commission letter, companies should discuss the effect "of impending accounting changes . . . to inform the reader about expected impacts on financial information to be reported in the future."

A spokeswoman at the SEC said the staff letter "is not binding" but "most companies regard it as authoritative."

She said companies that already have assessed their liability under the proposed accounting standard on post-retirement medical benefits by the Financial Accounting Standards Board, or have forecast the future impact on financial statements, "should disclose the information."

While it might not be binding, accountants are acting as if it were. "If the information is available, you would have an obligation to disclose the effect," said Tom Elliot, audit partner with the accounting firm of Arthur Andersen & Co., Atlanta.

In the 1987 letter, the SEC concluded companies should comply with disclosure requirements for accounting standards that have been issued but do not become effective until some future date because the existence of the stan-

See **Surprise** *on page 47*

INTERNATIONAL

Batterymarch sees green in Soviet venture

■ When it came to perestroika, people probably didn't think of Boston's Batterymarch Financial Management. How times have changed.

Earlier this month, Batterymarch unveiled its Soviet Companies Fund, a cooperative venture between Batterymarch and the USSR's State Commission on Military Industrial Production. The new fund will be seeking investments of between $400 million and $1 billion from no more than 20 corporations around the world covering 10 industries.

Through the Soviet Companies Fund, these companies would hold stakes in a subsidiary of a larger Soviet enterprise which will be converted from a producer of military goods to a provider of consumer and other non-defense products.

Participation in the fund should "help global companies find out about opportunities in the Soviet Union," said David Gill, trustee at Batterymarch. Once companies "get a glimmer" of the opportunities in the USSR, they might go on their own developing these opportunities, he said.

The fund itself is intended to last three years — after which participants would have the right to liquidate. This could happen in two ways: Either each investor would get a pro-rata share of the fund's portfolio; or, if participants all agreed, they could have an auction bid among themselves for the fund's assets.

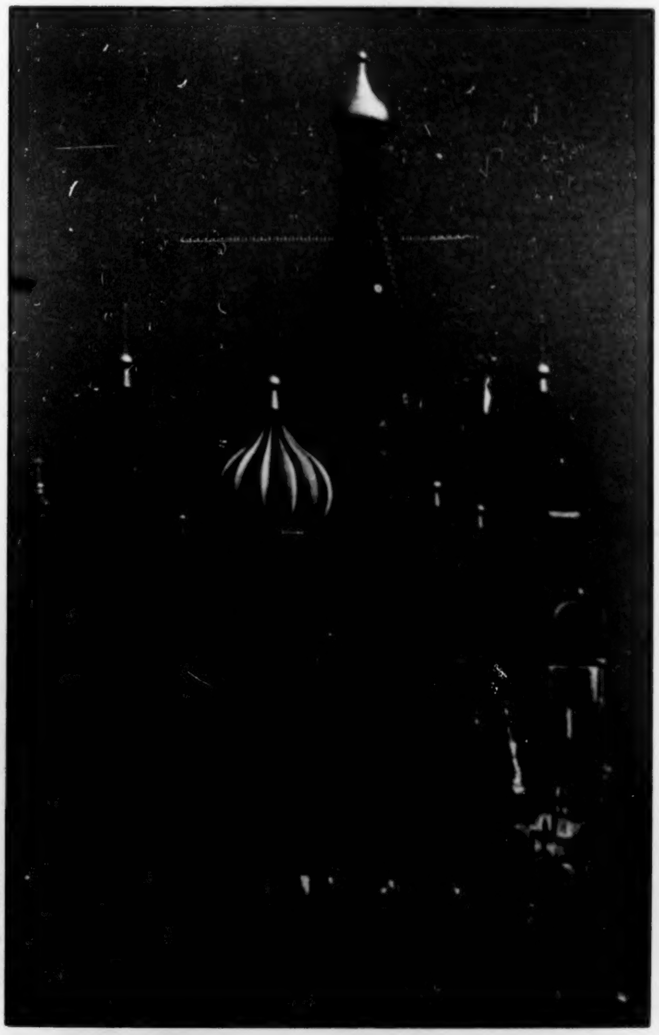


Photo by Margaret Price

Up to 20 corporations are being sought to invest in a venture that will help Soviet companies convert to consumer goods production.

PRIVATE PLACEMENTS

He isn't playing the Rule 144A game

■ While investment bankers are touting the virtues of the new private placement market under the Securities and Exchange Commission's Rule 144A, one longtime investor is disgusted with the whole affair.

"So far, all Rule 144A has done is diminish many of the most attractive aspects of privately placed securities, namely their negotiated protective covenants and call protection features," said Frederic Feuerherm, vice president-bonds of MIMLIC Asset Management, St. Paul, Minn., which has invested in private placements for more than 25 years.

"MIMLIC will not be a participant in the so-called 'new 144A market' where these features appear to be watered down," he added.

In the name of promoting greater liquidity, 144A is making privately placed transactions too standardized, doing away with the market practice of lender participation in negotiations and documentation, he said.

The private market always has been free of strict reporting and disclosure requirements. But that can be problematic when an issuer is from a foreign country that doesn't require extensive reporting of financial data or with companies whose information essentially must be taken at face value.

MIMLIC manages $5.6 billion; of that, $1.6 billion was in private placements as of Dec. 31.

Rule 144A was designed to make the secondary private placement market broader and more liquid by defining qualified buyers and waiving the previous two-year restriction on trading of the securities. It also exempted U.S. and foreign corporations from registration requirements on the resale of stock and bond offerings to qualified buyers.

Frederic Feuerherm believes Rule 144A is hurting protection features for investors.

MERGERS & ACQUISITIONS

Japanese pull back on volume of megadeals

■ Japanese companies scaled back megadeals in the United States during the first nine months of this year, slashing M&A volume to $4.1 billion, a fraction of the $11.1 billion at the end of September 1989.

According to DealScope, the mergers and acquisitions data base of Ulmer Brothers Research Institute, New York, the number of acquisitions and investments by Japanese companies in the United States increased 5% to 139, but volume dropped sharply because of the absence of very large deals.

Two large pending deals — the bid for MCA Inc. by Matsushita Electric Industrial and the acquisition of Southland Corp. by Ito-Yokado Co. and Seven-Eleven Japan Co. — would add almost $8 billion to the 1990 total.

To date, approximately half of the transactions have been acquisitions and half have been investments. The value of the acquisitions, at $2.3 billion, heavily outweighs the $1.5 billion in investments. The remain $300 million consists of joint venture buyouts and division purchases.

The mix of industries targeted by the Japanese was quite narrow. Three sectors — financial services, chemicals and computers — accounted for two-thirds of the deal volume.

WASHINGTON

Firms win contracts for auditing

■ Two accounting firms and an actuarial firm firms pulled down federal contracts to audit governmental retirement programs.

KPMG Peat Marwick's Washington office and Metcalf, Zima & Co., Atlanta, were picked by the Department of Labor to review adherence with federal fiduciary standards for the $10 billion federal Thrift Savings Plan.

KPMG Peat Marwick also will review the records of Wells Fargo Nikko Investment Advisors, San Francisco, and the U.S. Treasury that relate to the plan's stock and bond index funds. Metcalf, Zima will conduct selected audits of federal payroll and personnel sites around the country.

While the thrift plan is overseen by the Federal Retirement Thrift Investment Board, the Department of Labor has responsibility to regulate the fund.

Separately, Facciani & Co., Cleveland, won a government contract to perform an independent audit of the actuarial valuation of the Social Security Administration's Old-Age, Survivors and Disability Insurance program.

REAL ESTATE

Good deals are where you find 'em

■ Some institutional real estate investors, straying from their traditional approach of buying specific property types in specific markets, now say finding a good deal for any property type anywhere is their goal.

That's one of the conclusions of Chicago-based Real Estate Research Corp.'s third-quarter investment survey. *Pensions & Investments* will publish highlights of RERC's survey each quarter.

Among those specifying property preferences, industrial lost its top rank for the first time in more than two years, edged out by retail. Although some investors continue to favor regional malls, others now prefer community or neighborhood centers with at least one strong anchor tenant and good cash flow. In addition, power centers — shopping centers from 250,000 to 600,000 square feet with at least 60% of the space devoted to three or four anchor stores — were mentioned for the first time as the retail investment of choice.

Apartments, meanwhile, continue to garner increased investor interest, growing from the top preference of 6% of respondents during the first quarter of 1990 to 20% during the third quarter.

Investors' pre-tax yield expectations range from a low of 10% for regional malls to 13% for suburban office buildings. The median yield is beginning to rise; its current level of 11.5% is 50 basis points higher than year-end 1989.

Investors remain reluctant to project growth in income streams. In fact, most projections assume no growth in the first two to five years of a project, with only modest increases after that.

"No matter how intelligently a diversified portfolio of investments has been assembled, sooner or later the weakness of the real estate market will take its toll," the RERC survey concludes.

Top property preferences

	3rd qtr. 1990	2nd qtr. 1990	1st qtr. 1990	3rd qtr. 1989	3rd qtr. 1988
Industrial (%)	32	44	55	71	53
Retail (%)	36	38	28	21	32
Office (%)	12	-	11	8	16
Apartments (%)	20	19	6	-	-

Source: Real Estate Research Corp., Chicago

PEOPLE

Sole trusteeship splits candidates

■ One issue New York State Comptroller Edward Regan and his Democratic challenger Carol Bellamy are locking horns over is Mr. Regan's position as sole trustee of the $47 billion New York State & Local Retirement Systems.

If Ms. Bellamy, who is on leave from her job as a public finance banker at Morgan Stanley Inc., wins Nov. 6, there likely will be major changes in the way the big New York pension fund is run.

Mr. Regan has been in office for 12 years, and faces what even he acknowledges as his toughest opponent. Running the pension fund is only one of the comptroller's jobs; he is the state chief's fiscal officer.

Still, New York is one of only a few states where the pension fund is overseen by a sole trustee who is an elected official.

Ms. Bellamy has proposed creation of a seven-member board of trustees to manage the fund's investments.

Mr. Regan, who is well known in the public and corporate pension fund community, has himself called on the state Legislature to change the sole trustee system. The retirement system does have an advisory board.

Ms. Bellamy has said little about her stand on activism by public pension funds on corporate governance and social issues. Mr. Regan has been a behind-the-scenes player on governance initiatives, preferring to focus on the board of directors and one-on-one talks with portfolio companies. Under his stewardship, the pension fund has sponsored many shareholder resolutions on social issues such as Northern Ireland and South Africa.

Returns

Continued from page 2

commingled fund performance, separate account returns generally aren't published and are less widely known.

Callan officials say the separate account performance figures are significant because they are based on extensive property holdings valued at $14 billion.

They also said investors routinely might expect returns 300 to 400 basis points higher over time from direct separate accounts invested in core real estate than from commingled fund invested in core real estate. (Core real estate investments generally are top-grade, fully leased urban office and large retail properties, but sometimes include leased warehouses and apartments.)

Not all real estate professionals concur with Callan's findings.

Dennis Miller, manager of venture capital and real estate of the $2.5 billion Atlantic Richfield Co. pension fund, has found real estate separate account investment performance to be significantly higher than that of commingled funds. But he said a 620-basis point spread between the two — as Callan reported — sounds "a little high."

John Koza, a consultant for real estate and a senior vice president with The Frank Russell Co., Tacoma, Wash., questioned whether reported investment returns for separate accounts and commingled funds are analogous.

Separate account performance calculations aren't standardized, whereas commingled fund performance calculations are to some extent, he said.

In addition, some separate account properties are appraised only once every three years, whereas commingled fund properties generally are appraised at least once a year. And, Mr. Koza said, separate account numbers might include some items that wouldn't be tabulated as income in commingled fund returns.

"I would be concerned about drawing any major conclusions from (Callan's) numbers," he said.

Mr. Koza didn't say what he thinks separate account returns might be in a typical portfolio. He said returns would be influenced by the risk and reward guidelines established for a particular investor.

Todd Kurtin, a manager for Management Advisory Services with Kenneth Leventhal & Co., Los Angeles, said he wonders how the commingled and separate account returns could be so different when typically the advisers are the same for both types of accounts. He noted fees would account for some of the difference.

Jack Barthell, a partner at Leventhal, suggested some of the spread between separate accounts and commingled funds might be explained by the growing sophistication of advisers.

When commingled funds started, said Mr. Barthell, advisers had more of a "broker" orientation. They lacked some of the analytic, economic and market research and asset management skills they have today, he added.

Because many of the separate account investments were made subsequent to problems in the oil patch states, some separate accounts might have avoided investment in many properties that suffered subsequent sharp declines, Mr. Barthell said.

ARCO's Mr. Miller noted his pension fund, one of the first to establish a separate account for real estate, did invest in some oil belt properties, but the separate account still outperformed commingled funds.

Callan officials said their numbers for separate accounts were reported by investment advisers.

According to Callan, the spread between returns on separate accounts and commingled funds could result partly from clear directions and close monitoring by the pension investor.

Trustees for the Los Angeles County Retirement Association referred to the higher separate account returns recently when they called in executives from Prudential Real Estate Investors, Newark, N.J., and Sentinel Real Estate Corp., New York.

Company executives tried to dissuade the trustees from leaving Prudential's PRISA I fund and Sentinel's SRE fund.

The trustees listened attentively, but still followed the recommendation of Callan — their consultant — and voted to join the queue of pension funds waiting to get their money out.

They also voted to leave Equitable Real Estate Investment Management Inc.'s Prime Property Fund, a large open-end pooled investment vehicle like the two other funds.

Both Equitable's and Prudential's funds have some of the best investment returns among open-end commingled funds.

Sentinel's SRE fund has had less performance success lately, but it is 80% invested in one of the most popular property types, apartments.

In all, the Los Angeles trustees will take $59 million in core real estate holdings out of the open-end commingled funds. They also plan to exit some of their closed-end funds, when possible.

The trustees didn't make their decision to exit the open-end funds simply because of higher returns. They also expect to gain control over their assets and lower advisers' fees.

Still, substantially higher return numbers could be a powerful and convincing new incentive for pension funds to accelerate their move into separate accounts.

Decisions to leave commingled funds isn't necessarily all bad news for real estate advisers. Many of them later win back their old clients through separate accounts.

But the move to separate accounts could put additional downward pricing pressure on real estate advisory fees. With separate accounts, plan officials can better negotiate fee arrangements with real estate advisers.

Negotiation is often more difficult or impossible with commingled funds because assets are pooled and fees have to be charged equally.

More pension funds in separate accounts could create a kind of two-tier fee structure, with larger investors paying lower costs.

For the Los Angeles fund, the predicted fee savings is sizable — $4.5 million annually when all of its real estate assets are managed in separate accounts with a 10% allocation to real estate, Callan officials estimate.

According to Callan, commingled fund real estate fees are typically 1.25% of assets under management. Separate account fees, they said, are typically 0.8%, or 45 basis points lower.

By moving to a separate account, trustees also gain greater

See **Returns** *on page 49*

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Stocks

ontinued from page 3

The company's asset allocation udy last year led to a strategy of % equities (30% Swiss and 20% reign), 40% in cash and Swiss nds and 10% in foreign currency nds, said Mr. White. He said be- re the reorganization, the Unisys hweis fund had 15% in equities.

"We're funding long-term liabi- ies," Mr. White pointed out. he Swiss company is very prof- able and can take this added sk, and we expect we can im- ove benefits or lower contribu- ons because of this strategy."

Dow Europe S.A., Horgen, a it of Dow Chemical Co., reacted the rule change by lifting its uity investing target to 50% om 30% of assets, said Wolfgang chs, portfolio manager. Be- use of unfavorable markets, the proximately $140 million fund has about 35% in equities and 15% in cash. "But when the opportunity allows, we'll get to the 50% limit," said Mr. Fuchs.

"Pension liabilities generally increase about 15% a year. Therefore, we need higher returns to cover at least part of this liability increase every year," he said.

The fund is enjoying success with its strategy. According to Mr. Fuchs, the Dow fund usually posts a better performance than the best portfolios of the BVG index of Pictet & Co.

Executives for the IBM Switzerland pension fund, Zurich, responded to the law change last year by increasing the fund's "strategic allocation to international equities," said Walter Haab, vice president. While he didn't say to what the new allocation was, he did say that over time the fund planned to move "close to the allowable limit."

"We have been rather high in equities already, but proportionately lower in international, as compared with domestic equities," he said.

The approximately $125 million fund of du Pont International S.A., Geneva, has no targeted asset allocation. But the company, which has been using insurance contracts, "has decided to use more active management," said Jack Stair, senior consultant-finance, E.I. du Pont de Nemours & Co., Wilmington, Del. "We will continue to use insurance for (an undefined) portion of the fund but will begin to use active management, it's fair to say, for the majority of assets."

While the fund has selected money managers, Mr. Stair wouldn't cite how many firms, or which ones, were chosen. Changes are expected to take effect in January.

The review of pension investing came because company executives "had a sense that the maturity of the plan would support higher-risk investments," said Mr. Stair. ■

Unions

ontinued from page 48

re-seat executive committee.

During the next nine months, e Sheet Metal Workers moved protect its earlier investments. e fund guaranteed up to 75% of $10 million revolving line of edit to Chronar issued by Na- nal Bank of Washington. Har- rt Solar, an Alabama solar mpany, and its affiliate, Har- rt International, guaranteed re- yment of the remainder of the edit line.

In exchange for the guarantees, e fund and Harbert received sh fees and warrants to pur- ase company stock. Chronar of- red as collateral a security in- rest in its finished goods ventory, accounts receivable d other assets.

But the fund's involvement ew. In December 1987, the com- ny entered into a marketing, anagement and consulting reement with the pension fund establish the company's first miautomated 10-megawatt pho- voltaic manufacturing facility Fairfield, Calif.

Instead of manufacturing panels cording to the labor-intensive atch process," the much-vaunted ureka" technology would produce nels along a semi-automated pro- ction line.

Through a wholly owned sub- diary of the Sheet Metal Work- s, Energetics Jungere Corp., the nd agreed to pay $13 million for e facility's equipment. Chronar reed to operate the facility for ronar Photovoltaic Co. of Cali- rnia, a newly formed joint ven- re between Chronar, with a 4% ake; Energetics Jungere, 67%; G&E Enterprises, a subsidiary Pacific Gas & Electric, 27%; d Bechtel Development Co., 2%, nominee name.

The facility is supposed to be mpleted by the third quarter of 91. A PG&E spokesman, how- er, said PG&E dropped out of e joint venture, while Mr. Wil- ms said, "I'm confident they e still involved."

Electrical workers enter

In October 1988, 18 months ter the Sheet Metal Workers de its first major investment in ronar, the electrical workers' nd purchased $10 million of ronar's common stock through rivate placement.

That investment also gave the d the right to invest in any of ronar's future manufacturing power-station projects in the ited States, the company's 1988 annual report said.

The electrical workers also obtained two seats on Chronar's board and one on the executive committee. Christina Samson, who now serves as investment manager, and Jack F. Moore, trustee, were appointed to the board, expanding the number of board members to 13 from 11.

In the first five months of 1989, the union funds buoyed their investments in Chronar with additional stock purchases and a series of loans worth more than $7 million. The Sheet Metal Workers fund and Harbert also guaranteed a $10 million revolving line of credit issued by Midlantic National Bank, Edison, N.J., which had replaced National Bank of Washington as the firm's lead bank.

The company's fortunes were taking a turn for the worse. Losses increased to $12.8 million in 1988 from $8.9 million the year before.

Chronar hired turn-around expert Mr. Palmieri to assess the company's prospects and strategy.

Mr. Palmieri said the company would need a $30 million cash infusion and an overhaul of its senior management. Mr. Kiss resigned as chairman and chief executive officer and became vice chairman, while the board hired Mr. Palmieri to run the company, contingent on the company obtaining the new financing.

The funding chiefly was provided by the two unions, each of which bought $14.5 million of cumulative convertible redeemable preferred stock. Now, the Sheet Metal Workers fund owned 34.24% of Chronar, and the electrical workers fund owned 39.25%, if the two funds were to exercise their warrants and options.

Also, Renaissance Holdings PLC, London, provided $1 million to Chronar in exchange for convertible debentures.

As part of the deal, The Palmieri Co. received an option to purchase shares of a newly issued series of preferred stock.

But things didn't work out well. While Mr. Palmieri had a three-year contract with Chronar, he resigned in June. Later, Chronar's chief operating officer and its chief financial officer stepped down. So did three board members: both representatives from the electrical workers' fund and Harbert's representative.

While the Palmieri group brought a clear focus to the Eureka manufacturing project, Chronar could neither afford nor justify the type of expertise Mr. Palmieri typically provided, Mr. Williams said.

"The company needed to be reduced in size to a very small entity clearly focused on getting Eureka financing," Mr. Williams said. "I don't think it fit in with what the Palmieri Co. wanted to be doing." Mr. Palmieri declined to comment for this story.

Bankruptcy discussed

By August of this year, however, Chronar's situation had become dire. In its second-quarter statement, the company said it would have to suspend all of its operations or seek protection from creditors under federal bankruptcy laws unless it received a cash infusion within two weeks. At the time, the company said it needed an additional $15 million to continue operations through the end of 1990 and $10 million in 1991.

A month later, a small piece of that cash arrived — $2.15 million from Energetics Jungere, as its last installment in a $4 million purchase of Chronar's Eureka technology. Chronar has leased back the technology from the fund's subsidiary; Chronar has the right to repurchase the technology for $4 million plus a small stake in Energetics Jungere it had acquired as part of the transaction. But it needs $15 million to exercise that right.

Most of the company's hopes are riding on the the Eureka technology. Projected to be completed by the third quarter of 1991, the 10-megawatt facility, small by utility standards, is supposed to provide electricity at a competitive price, Mr. Williams said.

But Chronar's cash is only expected to tide over the company until mid-November, he said.

The company now is operating on a restricted spending plan.

The Sheet Metal Workers fund's continuing rounds of investments in a company taking continuing turns for the worse raise questions.

"The basic issue is, 'Has this deal turned sour' " said Michael S. Gordon a Washington pension attorney. "Even if it was prudent at the outset, is it prudent now?"

In addition, the Sheet Metal Workers' multiple transactions might pose problems under the 1974 Employee Retirement Income Security Act.

If Chronar is deemed a contributing employer to the fund — some of its operations were organized by the Sheet Metal Workers — it could be deemed to violate ERISA's prohibitions on dealing with a party in interest.

"You can't deal with a party in interest," said Ivan Strasfeld, director-office of exemption determinations at the Department of Labor. "You can't buy, sell, or hold in the absence of exemption." ■

Respect

Continued from page 3

later, a Nobel Prize.

His theory, known today as the keystone of Modern Portfolio Theory, and Mr. Sharpe's elaborations have spawned a whole generation of financial analysts whose work affects trillions of dollars of market investments.

Mr. Markowitz theorized that optimal portfolios could be built that would enhance returns by reducing risk. The riskiness of individual securities was not important in themselves, he said. Instead, using mean variance analysis, he focused on the risk of the entire portfolio and showed how diversification would reduce it and enhance returns.

Mr. Sharpe is credited with the development of the Capital Asset Pricing Model, the theory that risk could be split into two parts. Stocks in themselves posed what he called unsystematic risk. That risk could be lessened through diversification, per Mr. Markowitz's theory.

Where Mr. Sharpe took off from Mr. Markowitz was in the concept of beta, or systematic risk. Beta is the measure of variation of stock prices due to the movement of the market as a whole. No matter how diversified the portfolio, there would always be market risk.

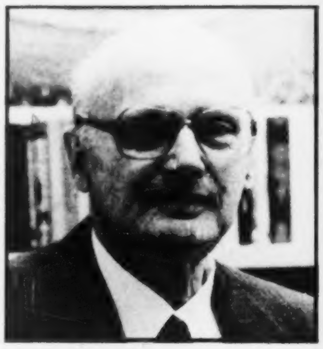
The theories have played a major role in the development of asset allocation models in use around the world.

"To me, Harry was the inventor, the man tinkering in the garage, and Bill is one of a number of really creative people who have taken that invention and run with it," said Keith Ambachtsheer, a Toronto-based consultant who has worked on further elaborations of Modern Portfolio Theory. "The reason I'm particularly pleased that Bill has won the award is that he's probably worked on it longer and harder than anyone else."

While Mr. Markowitz has concentrated on teaching and developing computer languages for applications to business problems, Mr. Sharpe has taught, written textbooks, developed software and now runs a consulting firm, William F. Sharpe Associates, based on implementing his theories.

The men's work came at a time when employee benefit plans were in their infancy; as the pension plans have grown to trillions of dollars, the guidelines the men set proved to be the basis for further writings, inventions and discussion around which investment decisions have been made.

Their theories — particularly Mr. Sharpe's focus on beta — have been challenged as the science of financial economics has matured and the ability of computers to explore their work has exploded. When Mr. Markowitz was writing a book based on his dissertation, computer data were input on punch cards, and he had only time to perform calculations on the relationships of 10 stocks. Now, hundreds of thousands of relationships can be performed in a day.



Harry Markowitz

"Nowadays, the world is different, but that doesn't mean any individual shouldn't move to minimize risk," Mr. Markowitz said.

"The history of ideas is never that someone comes up with something and that's it," Mr. Sharpe said. "You have to look at the whole stream of ideas and ask if it is better because this idea was in it."

To Mr. Ambachtsheer, the lasting value of the theories is evident in their use. They had little impact in the 1970s, he said, partly because the computer was in its infancy and also because of resistance from established economists.

"It needed a new generation that was comfortable with the mathematical approach to investing," he said. "The inventions came at a time when everything was in its place. The world in which they lived was a world of fixed exchange rates. Now, with the floating exchange rates, it is more important how you allocate your assets. Eventually, everyone has to do it."

What also will last is the thrill of winning the Nobel Memorial Prize in Economic Science.

Mr. Sharpe was tracked down in Tucson, where he was awakened at 3 a.m. by a phone call from the committee in Sweden. "This is the most one could ever reasonably hope to aspire to," he said.

Mr. Markowitz was tracked down in Tokyo, where he is teaching a semester at the University of Tokyo, taking a respite from his finance professorship at Baruch College of the City University of New York.

"Every person's dream in this field is to win the Nobel Prize," he said. "But what shook me up the most was the genuinely warm congratulations we've received and the enthusiasm with which my six kids are taking this," he said.

"It's sort of like the Chicago Cubs had won the pennant." ■

Returns

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liquidity and control over their real estate assets, according to Callan officials.

Control has become increasingly important as several pension funds have been locked into administrative snarls trying or threatening to get out of some commingled real estate pools.

Control is a reason the San Francisco City & County Employees Retirement System is adding real estate separate accounts.

Clare Murphy, chief executive officer, said San Francisco's investment return should benefit through reduced separate account fees, although she couldn't say by how much.

She's more concerned with the investment structure.

In a commingled fund, she said, "you are not only dealing with the difficulties of the real estate market, you are also dealing in a structure that puts you at the mercy of the other participants, the owners of the other shares." One problem with open-end funds is getting equal treatment, she noted, while in closed-end funds, the investor often must deal with high fees, little liquidity and set investment structures.

An early investor in commingled funds, San Francisco has put $200 million in separate accounts in the past two years. ■